

BETWEEN THE BUILDINGS

reimagining the streetscape of
castle street in geneva, n.y.

ZACH FELDER
FALL 2017-SPRING 2018
HOBART COLLEGE

HONORS THESIS
ADVISER, JEFFREY BLANKENSHIP
ARCHITECTURAL STUDIES

table of contents:

Introduction.....

Section I: Historical Research.....

- Castle Street Corridor
- Lakefront District
- Downtown District
- Gasper’s Corners District
- Castle Heights District

Section II: Precedent Plan Synthesis.....

- Castle Street Corridor
- Lakefront District
- Downtown District
- Gasper’s Corners District
- Castle Heights District

Section III: Design Development Process.....

- Components of Design Development
- Design Philosophy
- Limitations of Design Philosophy

Section IV: Physical Design Proposals.....

- Zone 1: Pedestrian
- Zone 2: Public Interaction Spaces
- Zone 3: Bicycle Infrastructure
- Zone 4: Automobile Parking
- Zone 5: Automobile Traffic
- Zone 6: Green Spaces

Section V: Wayfinding Proposals.....

- Introduction to Wayfinding
- Analysis of Existing Signage
- Proposed Improvements

Conclusion & Key Takeaways.....

References.....

introduction:

This Honors Project studies the history of the Castle Street Corridor from its eastern terminus at Seneca Lake to its western terminus at North Street, and specifically reimagines the streetscape of downtown Castle Street between Main Street and Routes 5&20, cited in the City’s 2016 Comprehensive Plan as one of five recommended project initiatives for development (czbLLC, et. al., 2016, p. 23). Defined as the “natural and built fabric of the street...including the design quality of the street and its visual effect,” the ‘streetscape’ recognizes that roadways are meant to be used for walking, sitting, playing, and bicycling, along with driving an automobile; this project consequently seeks to envision Castle Street as a welcoming public space for all (University of Delaware, 2018). The report is divided into five primary sections: Historical Research, Precedent Plan Synthesis, Design Development Process, 17 Physical Design Proposals, and 5 Wayfinding Proposals.

The Historical Research and Precedent Plan Synthesis sections include the entirety of Castle Street, and provided background knowledge necessary for proposing design changes to a specific district of the corridor. The Historical Research section describes four specific districts of the Castle Street Corridor, each directly related to a different aspect of the City of Geneva’s history: the agricultural industry in the westernmost Castle Heights District, African-American heritage in the central Gasper’s Corners District, everyday life in a prosperous community in the Downtown District, and shipping industry in the easternmost Lakefront District. The Precedent Plan Synthesis section is the first such synthesis of nine recently-commissioned professional urban design studies in Geneva, and resulted in fifty different suggestions related to the Castle Street Corridor that are described in Section II of this report.

The *Physical Design Proposals* and *Wayfinding Proposals* are grounded in this background research, and are focused only on the Downtown district within the Castle Street Corridor, in order to allow for more site-specific, developed proposals within the time scope of this project. These 22 collective proposals are a mixture of practical suggestions that are based on over 100 site visits, and more creative, “outside the box” ideas that take advantage of my non-professional status as an undergraduate student. In sum, the proposed redesign reduces unnecessarily wide traffic lanes in order to create: a more cohesive pedestrian experience that includes raised crosswalks; multi-use seating space that takes advantage of sunlight to create accessible, welcoming spaces for all, including those without economic resources to purchase goods downtown; a downtown bicycle loop that connects to existing lakefront paths; rearranged parking that still satisfies needs of surrounding businesses; and large green spaces that allow flora to flourish in an urban environment. Wayfinding Proposals, in particular, complement the physical proposals to increase the visibility of community assets, and to streamline the experience of navigating the Castle Street Corridor.

section i: historical precedents

The area now called Geneva, NY, was long known as Canandesaga (A), a noted meeting place and burial ground for the once-formidable Iroquois tribes (Brumberg, 1976, p. 8). A series of late-18th century European/American conquests, however, forced the Iroquois further west, leaving room for the city of Geneva to be first surveyed and founded in the 1790s by pioneer settlers (ibid., p. 8). Geneva quickly grew into a prosperous town filled with a combination of Southern aristocrats -- who settled primarily on the bluff (B) overlooking the lakefront south of present-day downtown -- and frontier agriculturists -- who greatly benefited from the fertile soil of the Finger Lakes region (Congdon, 1905, p. 11). By the mid-19th Century, the city had taken full advantage of its waterfront location, with steamers running up and down Seneca Lake and barges transporting freight through the newly-created Seneca-Cayuga Canal (C) (Parsons, 2012, p. 7). This level of connection, bolstered by the addition of two primary railroad lines (D), allowed Geneva's agricultural and industrial economies to link into the larger east-coast economy, securing the city's downtown development and general prosperity for the ensuing century (Parsons, 2012, p. 5).

The post-war decades of the 20th Century, however, left Geneva with nationally typical development patterns that still have an impact on the city today. Localized commerce departed the downtown (E) in favor of big-box stores along a commercial strip (F) outside the city limits, drawing traffic away from downtown (J. Salone, personal conversation, September 2017). City leaders responded with urban renewal efforts that left many downtown lots empty or filled with parking lots (Geneva Historical Society, 2007, p. 58). Traffic was routed away from the downtown in the form of a newly constructed, waterfront arterial road (G), blocking the waterfront (Geneva Historical Society, 2007, p. 47). The manufacturing sector struggled to adapt to changes in the larger national economy, leading to a decrease in population, an increase in poverty, and an overall depressed, empty downtown area (ibid.). Throughout the first decades of the 21st Century, however, the city has slowly rebounded, thanks to a re-emergence of agricultural prowess through wineries, large-scale investment in the historic downtown district, and flourishing institutions including the liberal-arts Hobart and William Smith Colleges (H), amongst other factors (czbLLC, 2016, pp. 7-8, 19).

FIGURE 1: GENEVA, NY



- A: ORIGINAL SITE OF KANANDESAGA
- B: SOUTH MAIN BLUFF OVERLOOKING LAKE
- C: LOCATION OF SENECA-CAYUGA CANAL
- D: LOCATION OF RAILROAD
- E: DOWNTOWN DISTRICT
- F: STRIP MALL OUTSIDE CITY
- G: ARTERIAL ROAD ALONG WATERFRONT
- H: HOBART AND WILLIAM SMITH COLLEGES

FIGURE 2: CASTLE STREET CORRIDOR



- A: TERMINUS OF CAYUGA-SENECA CANAL
- B: NURSERY LANDS
- C: DOWNTOWN CENTER
- D; CONTINUATION OF RAILROAD TO ROCHESTER
- E: SMALL STRIP MALL
- F; PARKING LOT -- URBAN RENEWAL RAZED SITE
- G: DIFFICULT CROSSING OVER ARTERIAL

Perhaps no street in the city is so deeply connected to all stages of Geneva's development as Castle Street is. For centuries, the area known presently as Castle Street connected Canandesaga, the Native American meeting and burial ground that was specifically located just west of Castle Street's western terminus, to Seneca Lake in the form of a walking path alongside Castle Creek (Brumberg, 1976, p. 7). Later, American developers continued to use this pathway as a main connective corridor between the waterfront and main destinations within the city and town; during the early 19th Century, it served as the connection between the terminus for the Seneca-Cayuga Canal at its eastern end (A) and the burgeoning nurseries, agricultural lands, and industries on its western end (B) (Smith, 1931, p. 82). Castle Street became one of the four primary streets in the downtown district, along with Seneca, Main, and Water (now Exchange) Streets (C), and perhaps the greatest testaments to Castle Street's importance include its becoming the first street to receive trolley tracks (D), and the fact that it bisects Main Street into its North and South segments (Geneva Public Works Report, 1913).

The 20th Century saw the conversion of agricultural land into higher-end suburban residential development on the western end of Castle Street, briefly giving the corridor a new function: the connection of residential areas to retail districts (J. Salone, personal communication, September 2017). The construction of a mini-strip mall, including a Market Basket grocery store (E) and Laundromat, furthered this pattern of use during the 1940s (Geneva Historical Society 2007, 73). However, the street succumbed to the aforementioned development issues of the mid-late 20th Century, as citizens no longer went downtown to shop and chose other corridors to access the Hamilton Street strip malls (J. Salone, personal communication, September 2017). Without as much through traffic due to the construction of the Routes 5 & 20 arterial by the waterfront, the downtown businesses struggled, and many consequently abandoned buildings -- particularly on Castle St. -- were razed and turned into parking lots (F) (Geneva Historical Society, 2007, p. 47). Furthermore, the construction of the arterial greatly hindered any pedestrian connection to the waterfront through Castle Street (Geneva Historical Society, 2007, p. 40). Unsurprisingly, Castle Street soon lost its identity as a primary corridor, and with several large downtown blocks of empty buildings and the closure of the grocery store in the mini-strip mall in 2015 (the building has since been occupied by a mini-mart), the street today finds itself lacking in identity and purpose of use, viewed more as a divider between neighborhoods than a connective corridor by planners and residents alike (czbLLC 2008).

In an effort to understand the various disconnected neighborhoods that Castle Street runs through today, the next section of this historical study has been divided into the four main "districts" of the street -- the lakefront connection, the downtown blocks, the lower-income Gasper's Corners district, and the upscale Castle Heights neighborhood -- each of which has its own distinct historical development pattern and heritage (illustrated by Figure 3). Although this strategy may seem to be an oversimplification of the street, both historical research and present-day investigations have supported this type of categorization. Furthermore, this thorough investigation of each district of the street enables a more focused and situationally-responsive design for each district, as discussed in Section III, which delves specifically into the downtown district.

FIGURE 3: CASTLE STREET DISTRICTS

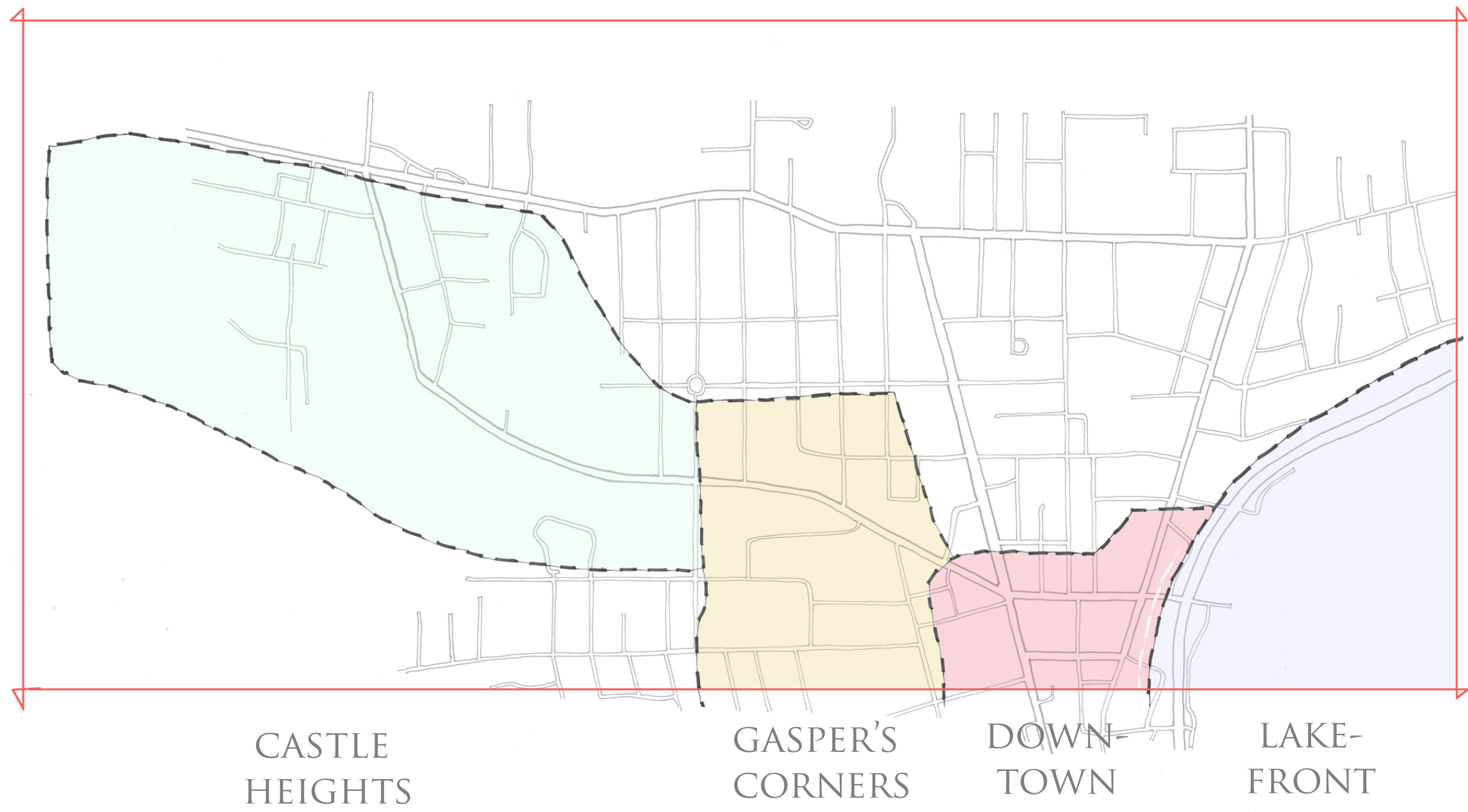
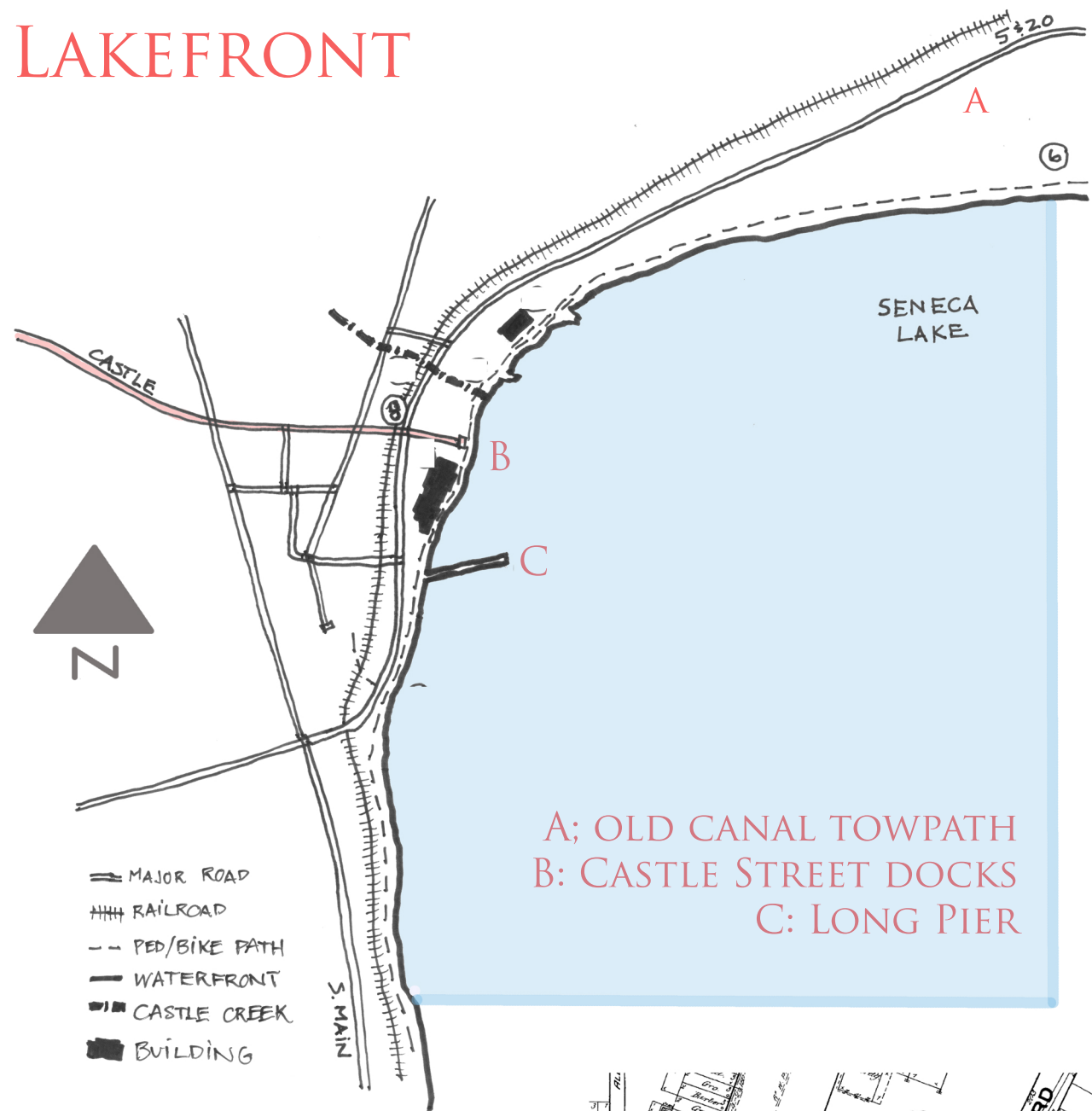


FIGURE 4: LAKEFRONT



Ever since the 1820s, Geneva’s commercial interaction with Seneca Lake has been centered around the base of Castle Street (J. Marks, personal communication, September 2017). The towpath of the Seneca-Cayuga Canal, which single-handedly connected Geneva’s agricultural economy with the larger regional economy through the eventual connection with the Erie Canal during the 1820s, ended right at the base of Castle Street (this towpath (A) was essentially where Routes 5 & 20 exist today, as the water came up to just past where the railroad exists today; see Image 1 (ibid.). Consequently, the street (B) became a logical place for docks and shipping-related businesses and activities. Furthermore, the construction of Long Pier (C) just south of Castle (where the pier’s replica exists today) allowed steamers with lengths often over 100 feet to dock and load or offload shipments from Watkins Glen at the south of Seneca Lake (Parsons, 2012, p. 7). In essence, the base of Castle Street became a “point of transfer,” the busiest and often most crucial point of any city, and participated greatly in increasing the city’s population twofold between 1820-1840 through the prominence of the shipping industry (ibid., 6; C. Hood, personal communication, October 2017).

However, the onset of the recreational age in the early 1900s, combined with the prominence of the railroad over water-based transportation, soon started to re-shape citizens’ interactions with the waterfront. Parks soon took over industrial shipping areas nationally, and Geneva proved to be no exception (ibid.). Capitalizing on the new land created to support the trestle railroad, which ran adjacent to the towpath, citizens pressed for the filling in of lakefront marshes and the creation of Lakeside Park (later improved upon and called Gulvin Park (Image 2) in the 1920s) (Emmons, 1931, p. 326). Between the ornate Miller Memorial Fountain (Image 3), placed at the eastern side of the Exchange-Castle intersection, and the graceful entrance gate installed at Gulvin Park, the waterfront began to assume a more ornamental, relaxing atmosphere (Geneva Historical Society, 2003, p. 15). This was reinforced by the establishment of Seneca Lake Park (Image 4) in 1929 along a larger swath of lakefront, with its beaches, markets, and even mini-golf courses (Emmons, 1931, p. 326; Geneva Historical Society, 2007, p. 108).

However, the construction of the Routes 5 & 20 arterial (Image 5) -- and the infill it required -- almost completely cut off the leisure-based relationship between the city and the waterfront, and pushed the waterline nearly 100 feet further away from Exchange Street (Geneva Historical Society, 2003, p. 47). Pedestrians attempting to access Seneca Lake via Castle Street now had to cross a major thoroughfare with multi-lane traffic. Today measuring over 70 feet across, Routes 5 & 20 still thoroughly discourage pedestrian access to the lake (and the recently constructed Ramada Hotel that towers over the lake), and attempts to connect the downtown district to the newly-revamped waterfront trails, activities, and gathering spaces via the Castle Street intersection unfailingly warrant attention from residents, planners, and politicians alike (Bardon & Loguidice, et. al., 2017, p. 59).

IMAGE 1:
GENEVA LAKEFRONT
CASTLE STREET DOCKS
1884

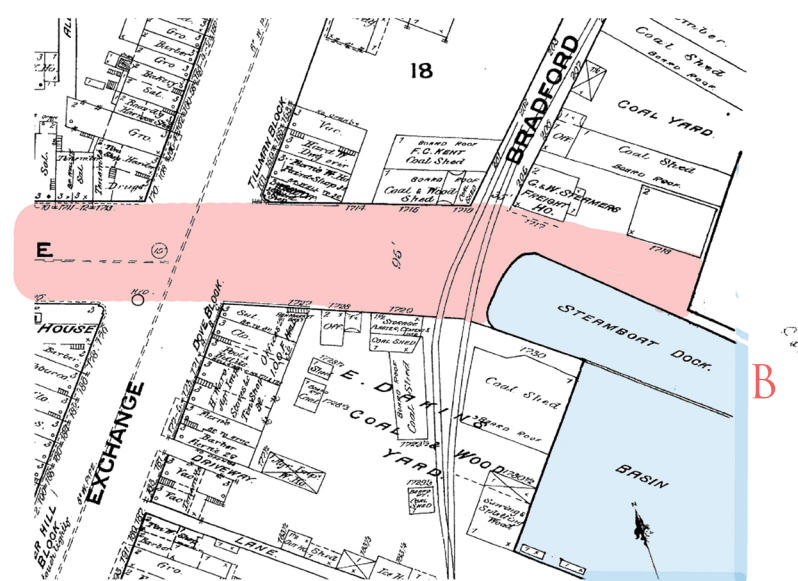


FIGURE 5: LAKEFRONT DISTRICT

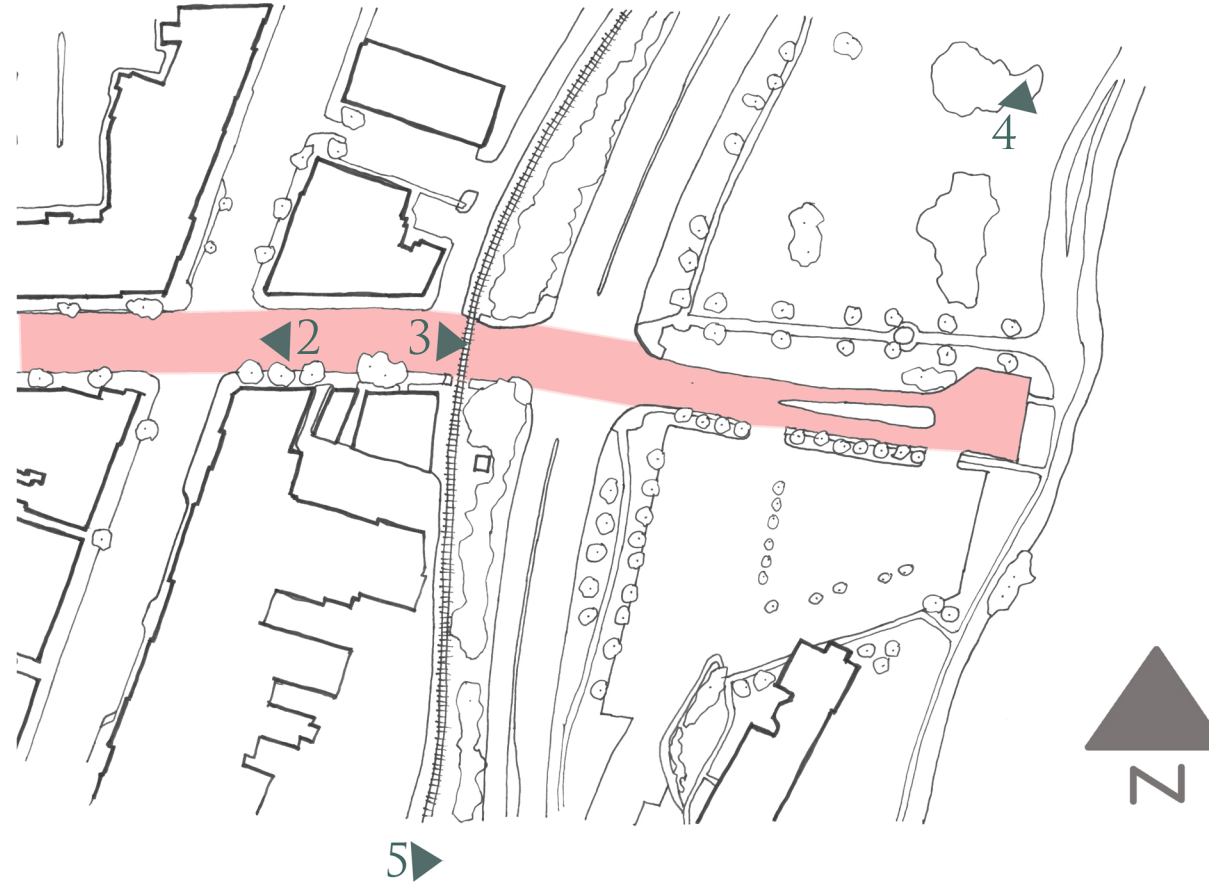


IMAGE 3:
SENECA LAKE PARK
MID-20TH CENTURY
N.Y. HERITAGE



IMAGE 4:
GULVIN PARK
CIRCA 1920
WATERFRONT
FEAS. STUDY



IMAGE 2:
MILLER FOUNTAIN
LOWER CASTLE ST.
CIRCA 1900
N.Y. HERITAGE



IMAGE 5:
ARTERIAL
CONSTRUCTION
CIRCA 1950
G.H.S.



FIGURE 6: DOWNTOWN DISTRICT

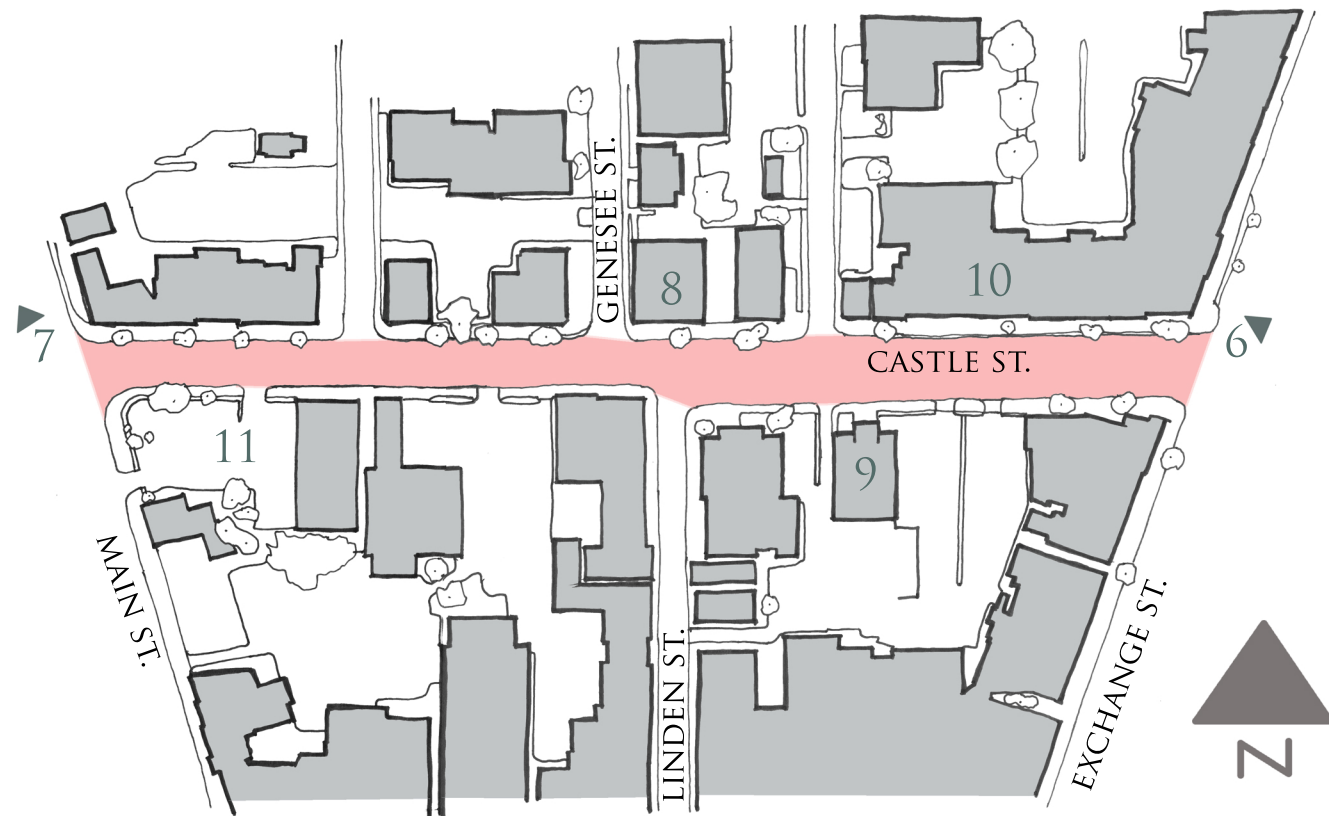


IMAGE 8: YMCA BUILDING
EARLY 1900S. NY HERITAGE



IMAGE 9: TOWN HALL
1913. G.H.S.



IMAGE 10:
R&E STATION
CIRCA 1900
N.Y. HERITAGE



6: NESTER'S HOTEL.
NY HERITAGE



7. UNIVERSALIST CHURCH
(NOW LIBRARY) G.H.S.



IMAGE 11:
PLYMOUTH GARAGE
TORN DOWN 1950S
FOR PARKING LOT
G.H.S

Downtown District History

Built throughout the 19th and early 20th centuries, Geneva's now-historic downtown district is filled with brilliantly designed buildings; indeed, several of the most important buildings of Geneva's history line Castle Street (J. Marks, personal communication, September 2017; J. Blankenship, personal communication, October 2014). Nester's Hotel (Image 6), built in the early 1800s, still stands today as the Hobby Shop on the northeast corner of Exchange and Castle (New York Heritage Collection). The Universalist Church on the northwest corner of Gasper's Corners (Image 7), sans its steeple, has been repurposed as the Geneva Public Library, one of the most valued cultural centers in town (Emmons, 1931, p. 191; Hayes-Conroy, et. al., 2017, p. 18). The YMCA building (Image 8) on the northeast corner of Geneva and Castle, built in 1891, rivals the Smith Opera House on Seneca Street as the finest architectural building in Geneva, and once held similar importance as a cultural center (J. Marks, personal conversation, September 2017). Additionally, the Geneva Town Hall (Image 9) and Post Office, both located on the southeast corner of Linden Street, illustrate Castle Street's continuing importance during the first decades of the 20th century, when these prominent buildings were constructed (Emmons, 1931, p. 326; Geneva Historical Society, 2003, p. 57).

While all buildings have shaped Castle Street's character, one building on the north side of Castle between Geneva and Exchange Streets (adjacent to the Red Dove Tavern today), has a far more direct relation to the streetscape. Home to the Rochester and Eastern electric interurban railroad terminal from 1904-1930, this station (Image 10) housed the railcars that travelled up and down the entirety of Castle Street on their way to and from Rochester via Canandaigua (Emmons, 1931, p. 277). Additionally, this building may well be responsible for the increase in road width on the eastern portion of Castle Street's downtown section, as railcars needed the extra room to enter the terminal at a perpendicular angle to the street. Overall, the large widths of Castle Street (and similarly used thoroughfares) are most likely due to a combination of fire safety measures, a view of the street as a social space, an accommodation for transportation tracks, though research could not directly support these claims (C. Hood, personal communication, September 2017). Though clearly not designed with its anticipation, the automobile's later widespread adoption certainly also benefited from such wide streets, incorporating diagonal parking and large volumes of traffic (Image 11) (Geneva Historical Society, 2007, p. 66).

20th Century urban renewal, however, undisputedly altered downtown Castle Street, specifically its southern side. Multiple buildings were razed, including the service station at the southeast corner of Gasper's Corners, which later turned into a Rite-Aid pharmacy with a large corner-facing parking lot (Geneva Historical Society, 2007, p. 68). Additional parking lots now cover roughly half of the southern side of Castle's downtown district, although the intersection with Linden Street, a charming, one-way street filled with old Smith Optical buildings, is one of the most dynamic and pedestrian friendly in the city (Emmons, 1931, p. 220).

FIGURE 7: GASPER'S CORNERS DISTRICT

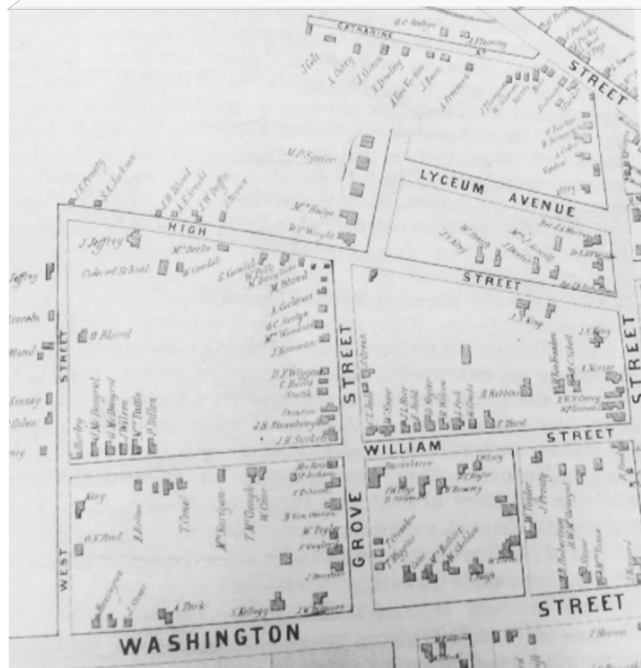
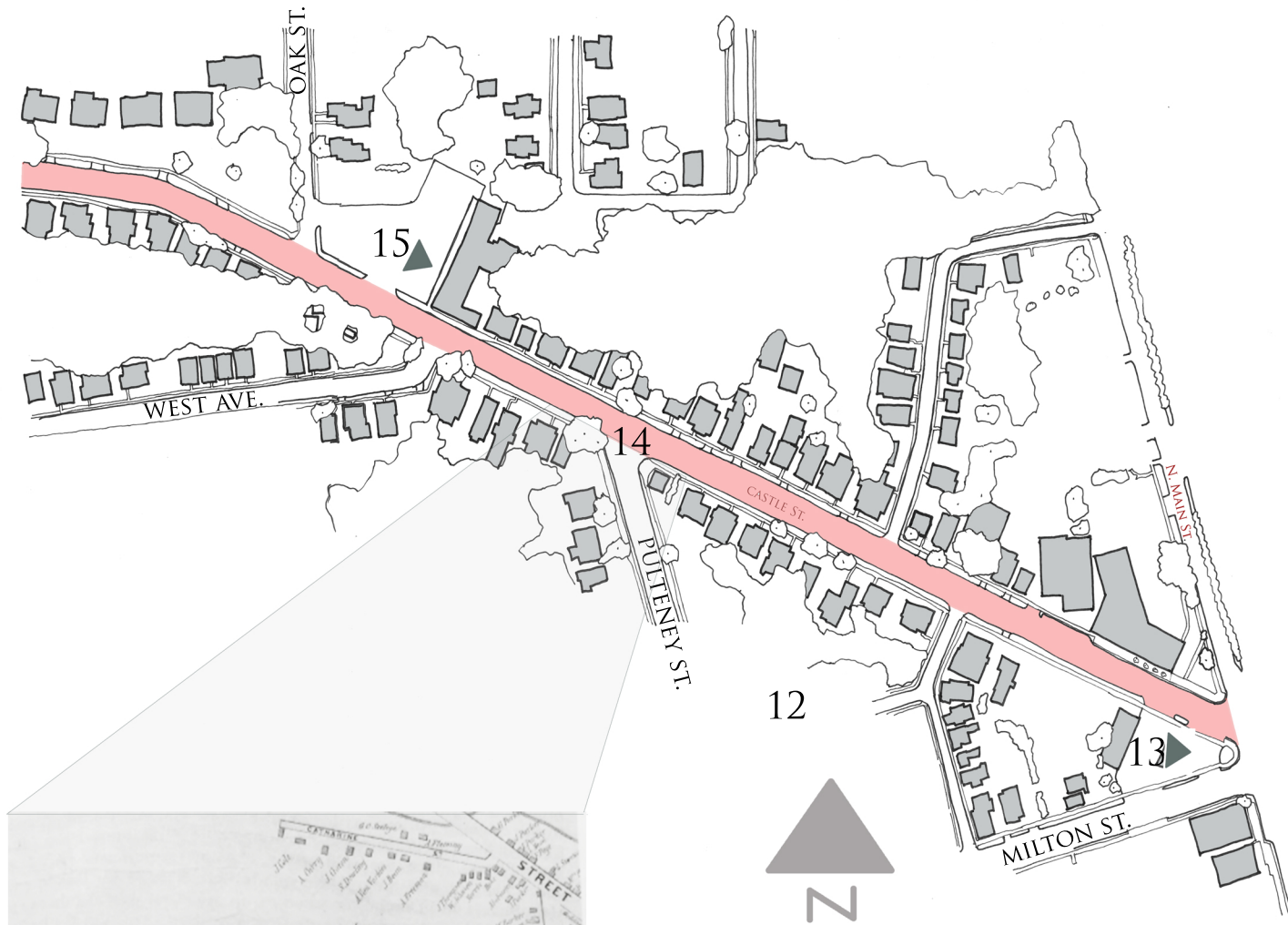


IMAGE 12:
PRIMARILY AFRICAN-AMERICAN
NEIGHBORHOOD IN 19TH CENTURY.

NOTE CASTLE ST. IN
TOP RIGHT CORNER

FROM: MAKE A WAY SOMEHOW

IMAGE 13:
GASPER'S CORNERS
FACING
DOWNTOWN
CIRCA 1900
G.H.S./



IMAGE 14:
PULTENEY INTERSECTION
PUBLIC SPACE
1800S
N.Y. HERITAGE

IMAGE 15:
MARKET BASKET
STRIP-MALL PLAZA
CIRCA 1950
G.H.S.



Gasper's Corners District History

The area between Main and Oak streets comprises the third, and arguably most undervalued, section of Castle Street. Unsurprisingly, given its history as a poorer area, little is known about the exact makeup of the neighborhood, save some generalizations from historians focusing on other areas of Geneva (Grover, 1994). Originally settled by a mixture of white settlers and African Americans in the early 1800s, this area of Castle -- and its surrounding blocks to the southwest -- soon became derogatorily known as "Little Liberia," according to historian Kathryn Grover (see Image 12) (African Americans have an extremely complex history in Geneva, given the city's explosive combination of a location in strongly abolitionist state, in a city filled with a significant Southern elite population; one visitor described Geneva as "the most aristocratic, pro-slavery hole I've ever visited" in 1849) (Grover, 1994, pp. 80, 103). In a similar observation, local elite Warren Hunting Smith stated that a well-to-do visitor would "do better to vanish into thin air" than to travel through this section of town during the early 20th Century (Smith, 1931, p. 81).

Despite its often-derogatory connotation, Castle Street was still used as a primary corridor during much of the 19th and early 20th Centuries (J. Salone, personal communication, September 2017). Indeed, the five-way corner at the intersection of Main, Castle, and Milton Streets was often referred to as "the gateway" to the downtown for residents and visitors from the surrounding countryside (Barton and Loguidice, 2016, p. 34). Called Gasper's Corners (Image 13), this intersection was surrounded by a two grocers and the Universalist Church (library), which became a focal point for the community, particularly after the development of more working-class homes along Castle Street (New York Heritage Digital Collection; Geneva City Directories, 1895-1898). A small park at the diagonal corner of Castle Street and Pulteney Street (Image 14) provided additional space for public gathering (Geneva Historical Society, 2007, p. 73). The 20th Century brought drastic changes to this district of the corridor with the infill of Castle Creek at the Oak Street intersection and the formation of the mini-strip mall on that land. Market Basket grocery store (Image 15) opened in the 1940s, and became a neighborhood staple with its conversion to Madia's Meat Market and Grocery (Geneva Historical Society, 2007, p. 73). However, with the decrease in traffic and property values during the second half of the century, this corridor of Castle has turned into an area with some under-maintained houses and a now partially empty strip mall plaza (czbLLC, et. al., 2016, p. 13).

FIGURE 8: CASTLE HEIGHTS DISTRICT

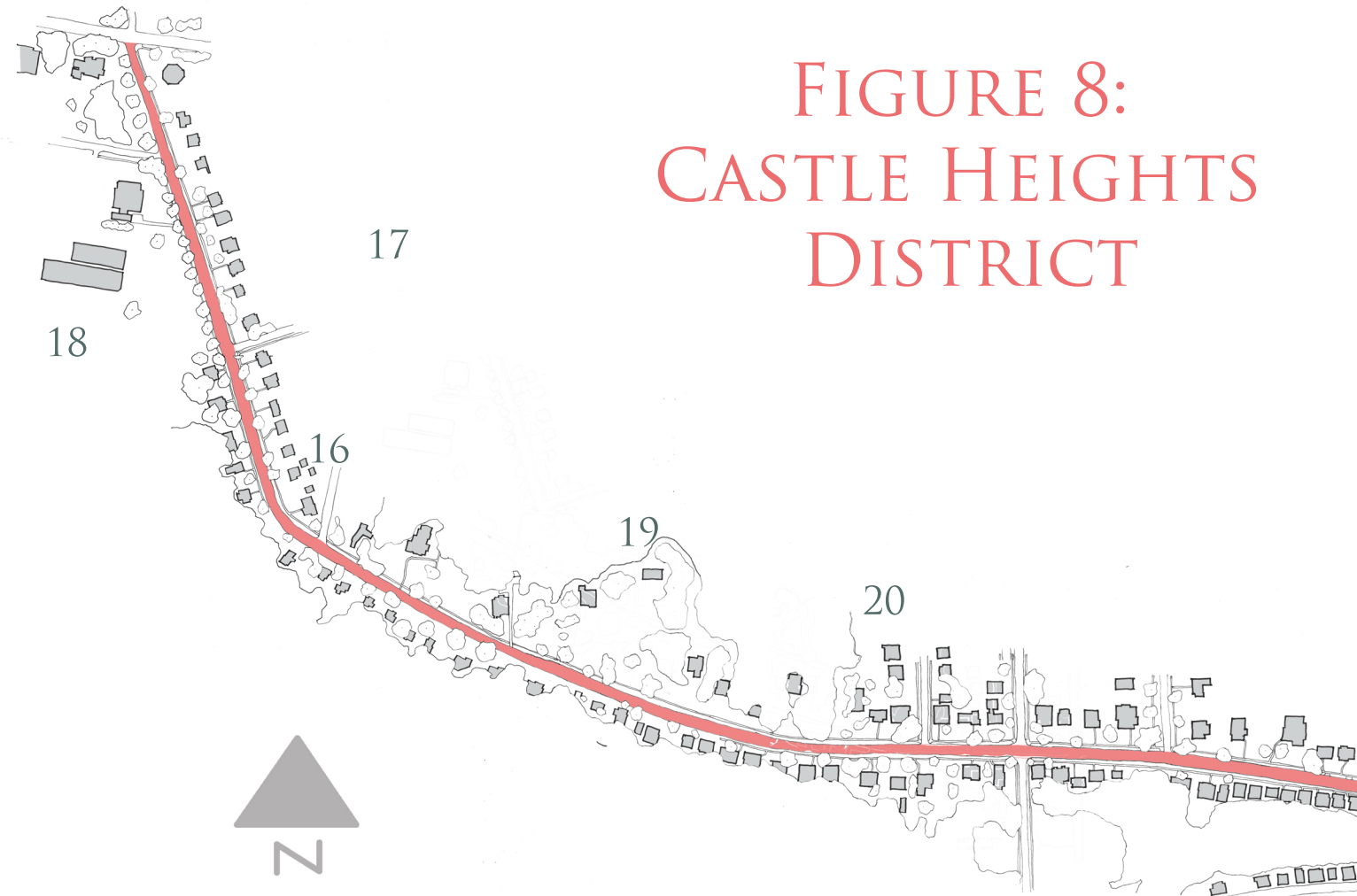


IMAGE 16:
THE MAXWELL NURSERY
1800s. NY HERITAGE



IMAGE 17:
SMITH NURSERY AND PARK
CIRCA 1895. G.H.S.



IMAGE 18:
CORNELL
AGRICULTURAL
STATION
1890S
G.H.S



IMAGE 19:
WILLIAM
SMITH
MANSION
CIRCA 1900
SMITH
OBSERVATORY



IMAGE 20
CASTLE HEIGHTS
UPSCALE
RESIDENCES
TREE-LINED
STREETS
EARLY 1900S
NY HERITAGE

Castle Heights District History

Not even incorporated into the City of Geneva until the latter half of the 19th Century, upper Castle Street has stayed true to its roots in the countryside (J. Marks, personal conversation, September 2017). After cash crop agriculture moved further west in the 1840s, several specialized nurseries opened on their lands on the edges of Geneva, the most famous of which bordered each side of Castle Street (Emmons, 1931, p. 220). The Maxwell family opened their nursery (Image 16) on the north side of Castle in 1848, and soon became one of the first families to become wealthy strictly based on work based in Geneva (Monroe, 1912, p. 170). The Smith brothers followed suit (Image 17), opening a nursery that generated enough money for the family to create the Smith Optical Company, Smith Opera House, and ultimately William Smith College in 1906 (Emmons, 1931, p. 220). In 1880, in an effort to take advantage of the agricultural successes in Geneva, Cornell University opened their sixth national agricultural experiment station (Image 18) at the western end of Castle Street (ibid., p. 220). Though opened to widespread skepticism and front-page derision in local papers, the Agricultural Station has since garnered national recognition for their development of genetically modified apples (including the Empire apple), and is now one of Geneva's most recognized and respected institutions (Brumberg, 1976, p. 120; Emmons, 1931, p. 281).

After the eventual demise of the nursery business (and its move further away from the city center) in the 1880s, many of these wealthy nursery owners began constructing lavish homes alongside their old nurseries along Castle Street (Smith, 1931, p. 80). William Smith's mansion, complete with an observatory, servants, and a horse track, quickly became known as a Geneva icon in the 1890s (Image 19) (ibid., p. 80). It proved a worthy complement to its neighbor, an ornate octagonal house built at the western terminus of Castle Street thirty years earlier (ibid., p. 81). Unsurprisingly, when the nurseries either went out of business or moved further into the countryside, higher-end suburban homes were constructed around these mansions, and upper Castle Street became a typical tree-lined mid-century boulevard (Image 20). (Geneva Historical Society, 2003, p. 66). Today, the area maintains its wealthier status -- at least in relation to the rest of Geneva -- though it struggles to compete with newer suburban developments both in and around the city (czbLLC, 2008, p. 14).

section ii: precedent plan synthesis

This section specifically references the following nine studies, completed within the last ten years (formal citations are found in reference list; color next to title corresponds to colors of suggestions from each document in Figures 9-13):

- The Neighborhoods of Geneva, NY (2008) (Orange)
- City of Geneva Lakefront/Downtown Connectivity Study (2010) (Navy Blue)
- City of Geneva Downtown Revitalization Initiative (2012) (Pink)
- City of Geneva Waterfront Infrastructure Feasibility Study (2012) (Green)
- Geneva Walkability Action Plan (2015) (Light Blue)
- City of Geneva Comprehensive Plan – Part I (2016) (Red)
- City of Geneva Comprehensive Plan – Part II (2016) (Gray)
- City of Geneva Comprehensive Plan – Big Talks in A Little City (2016) (Brown)
- Geneva Active Transportation Plan (2017) (Purple)

After decades of steady population decline in the latter half of the 20th Century, Geneva's population has recently stabilized around 13,000; as of 2016, 13,140 people called the city of Geneva home (czb LLC, 2016, ii, p. 8). However, according to census data, families are still leaving at an alarming rate of 15% per year, a sign that the city still has work to do to attract and maintain a core foundation (czb LLC, 2016, i, p. 9). In addition, with poverty rates over 25% (the number has barely changed since the Great Recession of 2008), Geneva today accounts for roughly 1/4 of the poverty in Ontario County, though it only contains 1/8 of the county's population (ibid, p. 9). However, due to a rejuvenated attitude, newfound community pride, and a new \$10 million dollar grant from New York State, Geneva has commissioned multiple in-depth professional and not-for-profit studies of the city's urban environment, which have provided the backbone for the research for this project (Cleveland 2016).

The collective goals for creating a more vibrant Geneva as stated in these documents can be summed into three categories, and these goals provided the main inspiration for the Physical Design Proposals and Wayfinding Proposals sections later in the report.

Goal 1. Heritage: Embracing Geneva's cultural, historical, and geographical heritage to foster and promote a distinct sense of place.

Goal 2. Community: Combatting theoretical and physical senses of segregation to create a more inclusive, shared, and proud sense of community through catering events, businesses, and public spaces to all interests.

Goal 3. Accessibility: Improving physical and geographic accessibility for all citizens through better non-automotive transportation infrastructure, services for the disabled, and more developed streetscapes.

According to these studies, *Goal 1: Heritage* can specifically best be attained through embracing many of the community-defining characteristics and locations already discussed in the Historic Research section: the historic downtown district, the lakefront, and the rich agricultural hinterlands. Section I of the 2016 Comprehensive Plan, for instance, calls for creating a "vibrant civic life" by embracing a downtown that is steadily rebounding and now holds over 1500 jobs (czbLLC, 2016, p. 19); similarly, the 2008 Neighborhood Report encourages creative reuse of downtown space instead of "another pharmacy or hotel" (czbLLC, 2008, p. 5). The 2012 Geneva Waterfront Feasibility Study calls upon the lakefront as another source of community identity, pointing out its ability to become a primary attraction of Geneva (Parsons & Brinckerhoff, 2012, p. 21). Finally, the 2016 Comprehensive Plan also points out the importance of "mak[ing] vital the expanses of countryside and the fertility of the lands surrounding Geneva" as a key opportunity for nurturing a sense of place, while the 2017 Active Transportation Plan pinpoints the benefits in fostering a close connection with the wineries that encompass the city as a strategy for facilitating this agricultural-based connection (czbLLC, 2016, i, p. 19; Barton & Loguidice, 2017, p. 9).

According to these studies, *Goal 2: Community* can best be attained by acknowledging that there is – amongst many -- a sense that Geneva is a disjointed community (even within neighborhoods), and by utilizing physical and financial tools to help bridge those gaps. According to a particularly blunt statement from Section III of the 2016 Comprehensive Plan, there is "not a lot of middle ground in Geneva. This kind of person comes here, and this kind goes here, and so on" (Hayes-Conroy, et.al., 2016, p. 9). This sense of disconnect is furthered by those who speak of "yuppies" taking over the downtown, and a division between "townies" and "students" that is a part of everyday discourse in Geneva (J. Salone, personal communication, 2017; czbLLC, 2016, ii, p. 34). As the Historical Research section has already illustrated, Geneva was developed in segregated areas, and quotes such as these clearly illuminate that these divisions still persist today.

Precedent Plan Synthesis of Castle Street Corridor

However, many of these recent documents also express a belief that this mental (and often geographical) separation can be ameliorated through physical and community-based improvements. The 2008 Neighborhood Study, for instance, calls for the creation of “community markets” to facilitate bonding and respect within each of the 11 designated communities within Geneva (czbLLC, 2008, p. 7). Furthermore, it then suggests that “commodious pathways” between these neighborhoods can help create a sense of community connection (ibid.). A similar train of thought informs the 2016 Comprehensive Plan, which includes two key initiatives that promote the development of “corridor” streets (Hamilton & Exchange Streets, and Castle Street) (czbLLC 2016, i, p. 23). Notably, the Comprehensive Plan also points out the need to foster business opportunities for lower-income owners on these types of streets, though it does not mention residential strategies for addressing the same demographic (czbLLC, 2016, i, p. 26).

Further developing the strategies for Goal 2: Community, on a more detailed and practical level, can best accomplish *Goal 3: Accessibility*. For instance, the 2017 Active Transportation Plan notes that facilities that promote non-automotive transit can – amongst several other characteristics – directly help “connect a community, enhance accessibility, and promote economic opportunity for all” (Bardon & Loguidice, 2017, 10-11). This last point regarding economic opportunity is particularly crucial for Geneva, as Section II of the Comprehensive Plan points out that the city’s profile of 50% minority residents and 25% poverty levels make the city a prime candidate for being an “Environmental Justice Area,” the type of area where residents are often economically hamstrung by a lack of transportation to potential employment opportunities and often rely on walking or biking (czbLLC, 2016, ii, p. 16). Indeed, this observation is supported by the fact that 17.5% of Genevans walk to work, an astonishingly high number in relation to the national average (2.9%), and the state average (6.4%, including the New York City Metropolitan Area) (ibid., p. 17). Given this anticipated – and already proven – need, ensuring the further development of pedestrian, bicycle, and public transit infrastructure (including both transportation and storage facilities, particularly for bicycles) is a clear strategy that ought to be pursued by the city to help ease a sense of economic and social division (Ingalls Planning and Design, 2010). Furthermore, the 2015 Geneva Walkability Audit points out the need for making all infrastructure fully accessible for all citizens, by following – and exceeding, where appropriate – ADA standards (Geneva-Finger Lakes...Program, 2015, p. 6). In many cases, improved public transit services, particularly those that are coordinated well with pedestrian and bike infrastructure, can lead to increased usage of all types of non-automotive transportation, and Geneva is in a position to create just that type of symbiosis, particularly focusing on Castle Street.

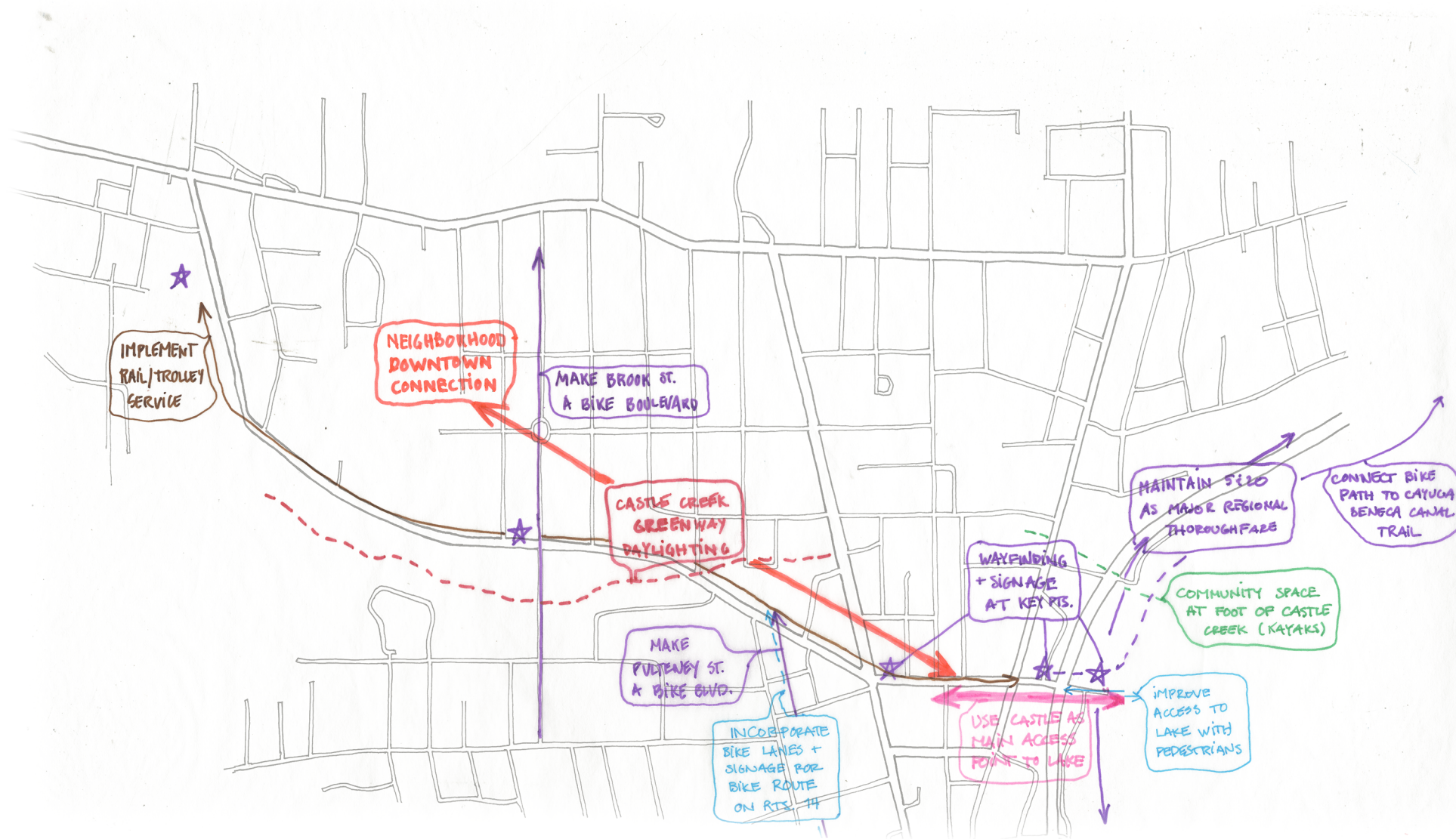
Section I of the 2016 Comprehensive Plan outlines five specific “Priorities” for the City of Geneva moving forward: Developing the downtown, the lakefront, selected corridors, housing opportunities, and the economy (czbLLC, 2016, p. 22). Furthermore, it calls for working on five specific “Initiatives,” or focus areas, in order to help stimulate progress towards achieving these goals (ibid., 23). The Initiatives are as follows: developing the downtown district; improving the streetscape of Hamilton St. and Exchange St. corridors; focusing on enhancing Geneva’s “amenities” (e.g. the lakefront and the library); increasing economic opportunity; and developing Castle Street as a connective corridor (as discussed in the introduction, this last initiative was the impetus for this project). Furthermore, the 2017 Active Transportation Plan expands upon the goals for these corridors, calling for “Complete Street” designs that cater to pedestrians and bicyclists through appropriate lighting, signage, and bike storage (Bardon & Loguidice, 2017, p. 35).

The Comprehensive Plan, however, is the only document that mentions the opportunity (or even the possibility, for that matter) of developing Castle Street as a corridor, and even this document fails to recognize just how important and relevant the street is. Specifically, it fails to explicitly recognize that Castle Street directly relates to every one of its stated 5 “Priorities,” a realization that would surely put the street at the forefront of the planning process. It is one of the four core streets that runs through downtown, and could be the trendsetter for streetscape requirements in that district (Priority I). It is the street that has the greatest historical connection to the lakefront, and has long been at the core of the conversation as the “node” connecting the lakefront to the rest of the city across Routes 5&20 (Priority II). Of course, it is one of the city’s key designated “corridors,” and could set streetscape standards for other corridors to follow (Priority 3). It passes through diverse housing types, from apartment-style living downtown, to smaller single-family homes in the Gasper’s Corners area, to grand houses in Castle Heights (Priority 4). It features several different types of business opportunities, from a small strip mall to conventional downtown storefronts, and developing these buildings (particularly those in constant flux or entirely empty) will likely play a key role in defining the city’s economy over the next decade (Priority 5). Furthermore, Castle St. features several of the key “amenities” that are suggested in the “5 Initiatives,” including historic downtown buildings, the Public Library, and lakefront access.

However, due to the fact that all of the pre-Comprehensive Plan documents were not created by the same firms, it is not surprising that the connection has not yet been explicitly made of just how crucial Castle Street’s development is in the future of Geneva’s urban environment. The 2008 Neighborhood Report acknowledged the importance of Castle Street, as the authors used the street as a key dividing line between the Hildreth Hill and Historic North neighborhoods, which they then encouraged to turn inward in efforts to develop district-based pride (these neighborhoods are essentially bisected by a bulge of the downtown district up Castle Street, even though these houses have far more of a visual and historic connection to the Hildreth Hill and Historic North neighborhoods than the downtown district) (czbLLC, 2008). However, this line of thinking unfortunately fails to recognize the opportunity of these streets to bring together communities, not separate them. This report, contrastingly, is the first attempt at a synthesis of the plethora of theoretically and spatially separated suggestions for the street with the explicit goal of utilizing Castle Street as a corridor that connects these four neighborhoods, as illustrated in Figure 9, which compiles all corridor-related goals from these nine documents.

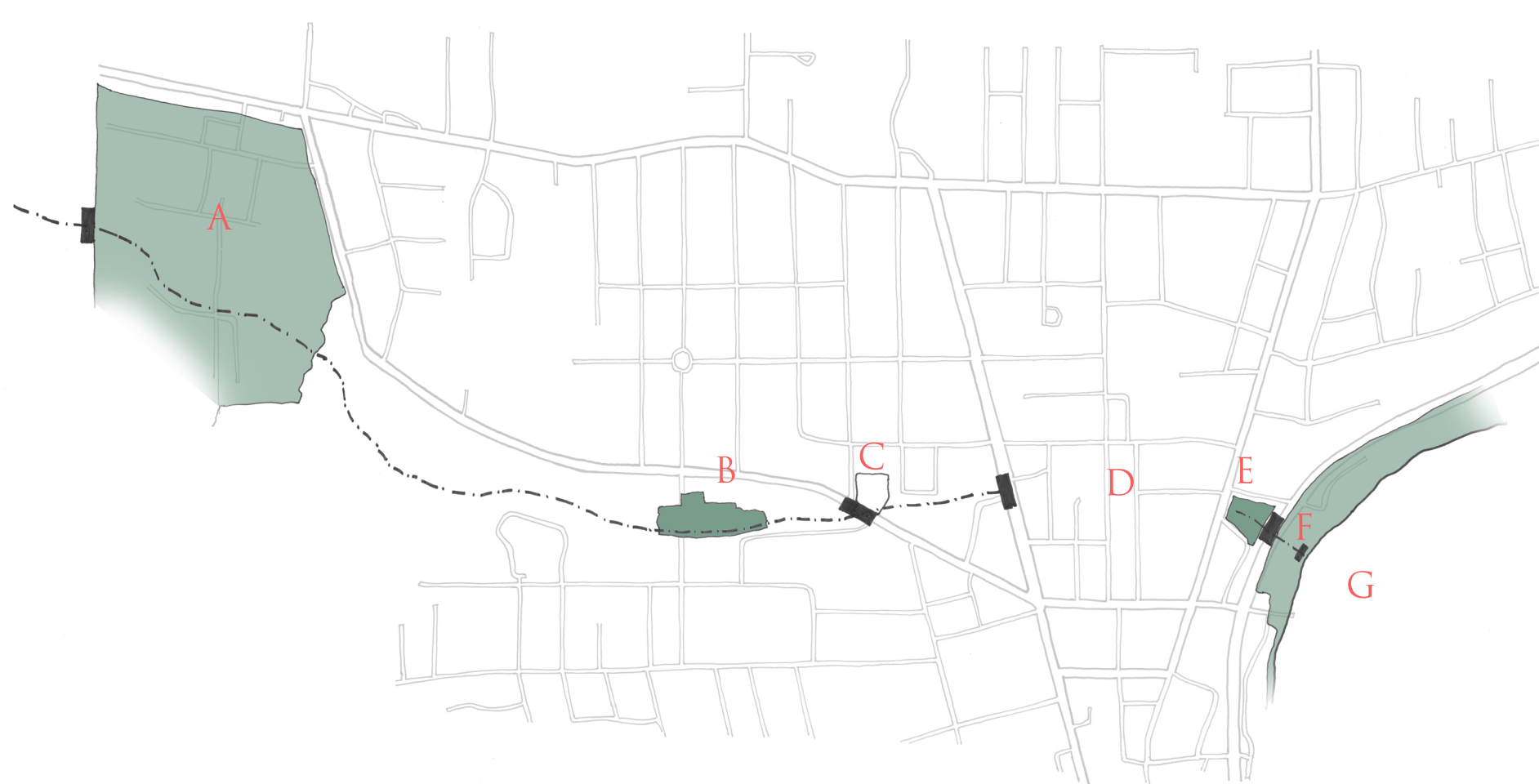
FIGURE 9: CORRIDOR-RELATED SUGGESTIONS

KEY:
LEGEND FOR EACH PROJECT
& PLAN STUDIED



- GENEVA COMPREHENSIVE PLAN - PART I (2014)
- GENEVA COMPREHENSIVE PLAN - PART II (2016)
- GENEVA COMPREHENSIVE PLAN - PART III (2016)
- ACTIVE TRANSPORTATION PLAN - (2017)
- GENEVA NEIGHBORHOOD STUDY (2008)
- WALKABILITY ACTION PLAN (2015)
- WATERFRONT FEASIBILITY STUDY (2012)
- LAKEFRONT-DOWNTOWN CONNECTIVITY STUDY (2010)
- DOWNTOWN REVITALIZATION INITIATIVE (2014)

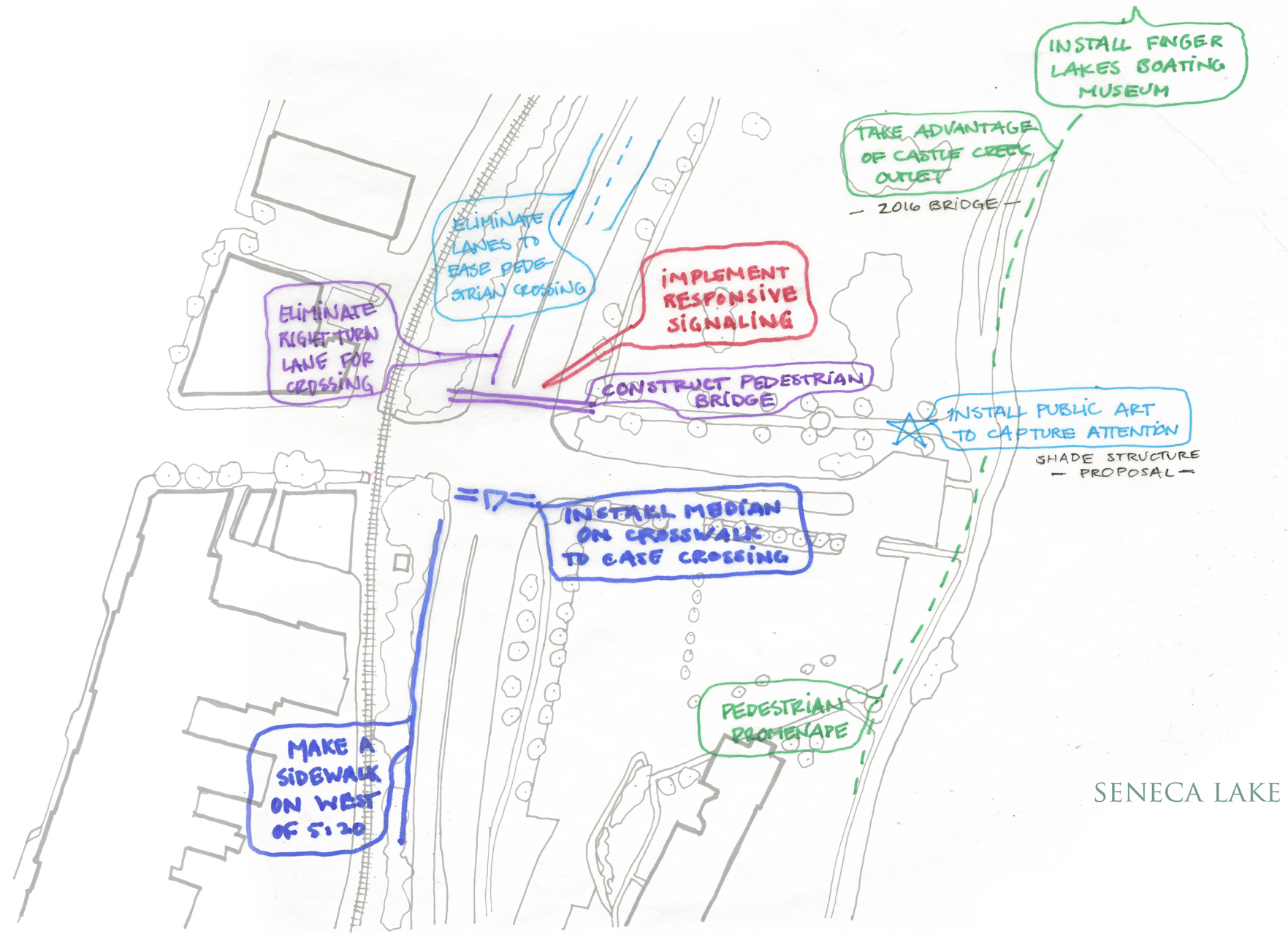
FIGURE 10: CASTLE CREEK PATHWAY



A: AGRICULTURAL STATION LAND B: BROOK ST. PARK C: TUNNEL UNDER STRIP MALL
 D: UNDERGROUND E: LAKEFRONT PARK F: SENECA LAKE PARK G: SENECA LAKE

One key possibility for creating this sense of connection that many documents have mentioned is the “rediscovering” of a lost “urban environmental asset” that surrounds Castle Street: Castle Creek (Figure 10) (czbLLC, 2016, p. 37). Winding through the southern end of the Agricultural Station, Castle Creek goes through the backyards of houses on Castle Street and West Avenue, where it is buried under the old Market Basket strip mall plaza (Google Maps, 2018). It emerges on the north side of Castle Street, where it heads north of Dorchester Street and flows several blocks north of Downtown. However, it re-enters the scope of this project when it empties into the lake several hundred feet to the north of East Castle Street’s terminus at the lakefront (Parsons & Brinckerhoff, 2012). Several documents – particularly the 2016 Comprehensive Plan – mention the idea of utilizing Castle Creek as a way to “connect amenities,” which certainly hints at the aesthetic possibilities of facilitating access to the creek as a connective asset (czbLLC, 2016, i, p. 37). The suggestion of implementing effective wayfinding, raised by the 2010 Lakefront-Downtown Connectivity Study, furthers the possibility of effective linking of areas, and is investigated in Section V of this report (Ingalls Planning and Design, 2010).

FIGURE 11: LAKEFRONT SUGGESTIONS



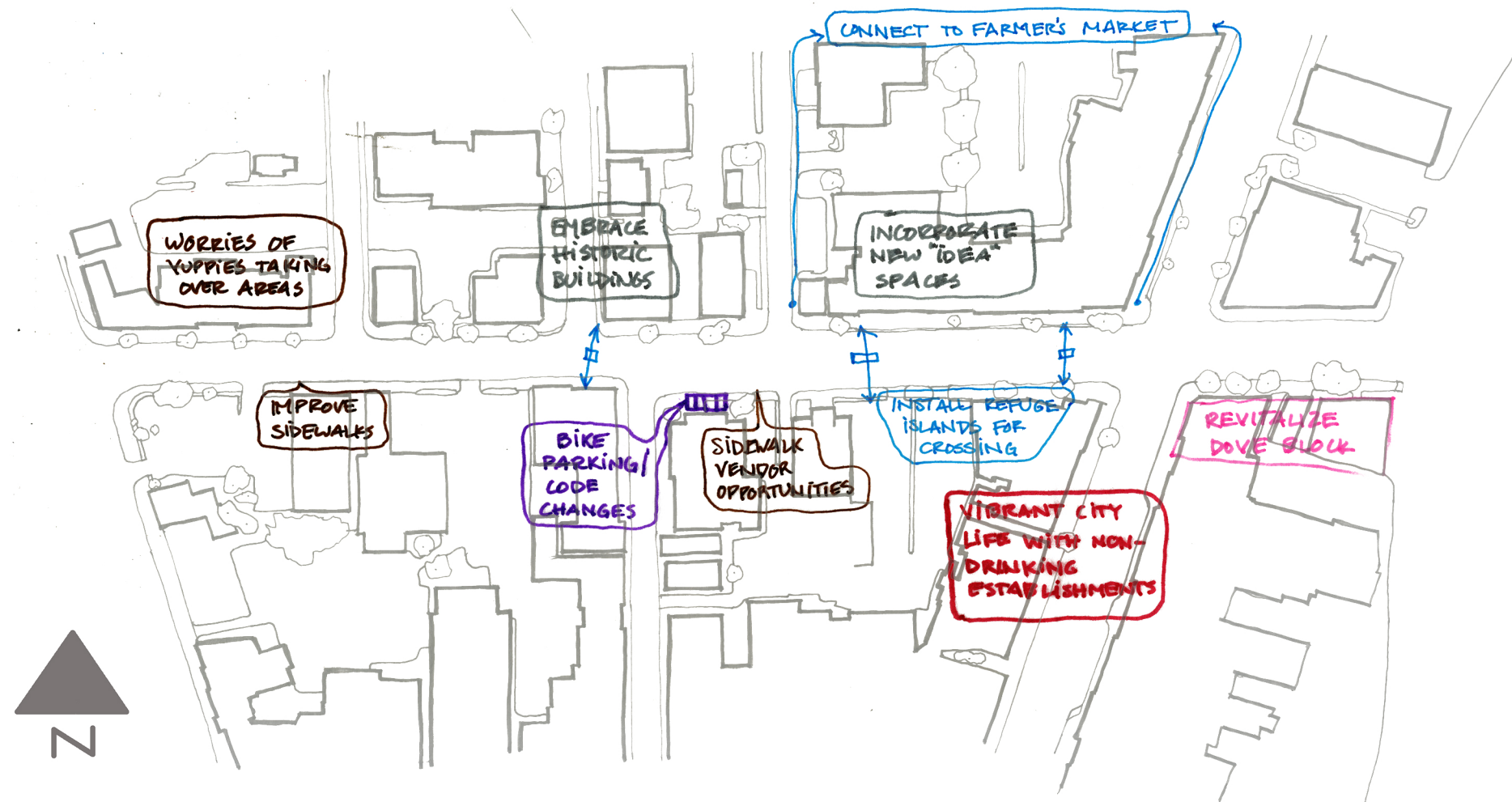
Given the waterfront’s historical, aesthetic, and economic significance, it comes as no surprise that nearly every plan analyzes and discusses Geneva’s connection with Seneca Lake, particularly in regards to “establishing a direct connection between downtown and the lakefront” (Parsons & Brinckerhoff, 2012, p. 32). In fact, the 2016 Comprehensive Plan notes that making the lakefront “a primary attraction” would be a key factor in “luring families to the community,” particularly if Castle Street becomes a key linkage between family-friendly neighborhoods and the lakefront (czbLLC 2016, i, p. 16). This statements rings particularly true when the document notes that Geneva is “one of the few Finger Lakes cities with direct public lakefront access” (ibid., p. 17). While several documents mention possibilities of accessing the lake across Routes 5 & 20 from a tunnel several hundred feet south of the Castle intersection, or via intersections to the northeast of Castle, most planners and community members have agreed that the Castle Street and 5&20 intersection is the most logical point of connection between downtown and the lakefront, as exemplified in the 2012 Downtown Revitalization presentation (Bergmann Associates, 2012).

Having settled on this conclusion, however, does little to ameliorate the issues of actually crossing 5 & 20, which is one of the most controversial intersections in the city. With a 6-lane highway, infrequent signal changes, and little pedestrian infrastructure – along with a railroad mere feet west of the intersection -- accessing the lakefront is a pedestrian nightmare (an informal study I conducted in 2016 noted the average time it took to cross the intersection during weekday afternoons at roughly 53 seconds). Several studies (as well as casual conversations with residents) often bring up the possibility of a pedestrian bridge as a functional and aesthetic landmark for the city, but the constraints (ADA regulations of maximum slope, having to achieve a height to accommodate trains as well as 18-wheelers, and signal visibility) would lead to a bridge of at least 400 foot ramps at a cost of over 1.5 million dollars, both rather prohibitive features (other estimates have listed the proposed bridge at over 4 million dollars) (Bardon & Loguidice, 2017, p. 59; Shaw, 2013).

The more creative documents, however, experiment with ways to make the existing intersection more accommodating to crossing pedestrians and bicyclists, while still recognizing 5&20's nature as a major regional thoroughfare (thus rendering the idea of creating a roundabout at this intersection moot). These ideas include: decreasing the amount of lanes -- or merely removing right turn lanes -- in order to decrease the pedestrian crossing distance; installing medians with "refuge islands" to break the pedestrian crossing into two more manageable segments; establishing a better sidewalk network on the western side of Routes 5&20 to allow for more options for crossing; and modifying the signal based on immediate responses and longer-term patterns of pedestrian and bicycle crossings (Ingalls Planning and Design, 2010; czbLLC, 2016; Parsons & Brinckerhoff, 2012; Bardon & Loguidice, 2017).

While nearly every plan recognizes the importance of effective infrastructural access to the waterfront (Goal 3), many plans also recognize the need for creating a waterfront space that will feel welcoming and interesting for all types of visitors, regardless of locality, ethnicity, race, or income level (Goal 2). The Geneva Waterfront Feasibility Study states: "People need a reason to want to access the lake, not just the means to get there" (Parsons and Brinckerhoff, 2012, p. 22). Section 3 of the 2016 Comprehensive Plan (Big Talks in A Little City) magnificently illustrates the value the lakefront has for all members of the community, quoting citizens who call it "family friendly" in contrast to other parts of the city, a "god-send" because of physical limitations of engaging with nature, and "enjoyable" despite its physical separation (Hayes-Conroy, et. al, 2016, 17). Recent renovations, based on suggestions from the 2012 Geneva Waterfront Feasibility Study, have done much to create an inclusive and aesthetically pleasing environment at the lakefront (personal observation, 2015-2018). A bridge over Castle Creek has provided a physical linkage between the Castle St. area waterfront and the Seneca Lake Park to the north, making Castle St. an even more crucial connection point (City of Geneva, 2016). Furthermore, the creation of benches, winding lakefront paths (the "Pedestrian Promenade"), and a small amphitheater have created an environment that seems accessible for all; additionally, a proposal for a shade structure at the foot of Castle St. will help create a visual attraction seen from downtown, and hopefully be a reason for crossing 5&20 to access the lakefront (Parsons & Brinckerhoff, 2012; City of Geneva Public Art Committee, 2016). Efforts to create a "Finger Lakes Boating Museum," suggested by the 2012 Waterfront Feasibility Study, also hint at possibilities for creating spaces that both honor local heritage and appeal to outside tourists (Parsons & Brinckerhoff, 2012).

FIGURE 12: DOWNTOWN SUGGESTIONS



Precedent Plan Synthesis of Downtown District

Most of the strategies and suggestions for creating a more vibrant downtown district – particularly on Castle St. -- that are mentioned within many plans also line up with the Three Goals outlined in the introduction to this section of the report. For instance, many documents, particularly Part II of the Comprehensive Plan, delve into the economic and cultural potential of the landmark historical buildings that fill the downtown streets (the entire downtown district, as well as the post office on Castle St., is listed on the National Register of Historic Places) (czbLLC, 2016, ii, pp.16, 26). This reflects Goal 1: Heritage, using these downtown buildings to illustrate Geneva's historic prowess. The aesthetic and cultural benefits listed by the Comprehensive Plan of re-purposing these old buildings, including marketing advantages and a greater sense of history and community pride, seem rather obvious (ibid., p. 16). However, the economic incentives of doing so -- though less obvious -- are far more potent, and could lead to even more businesses along Castle Street. According to the Comprehensive Plan, Income Tax Credits of up to 20% can be obtained by businesses opening in a national historic district; additionally, a statewide residential-commercial exemption that defers costs for 8 years is available for entrepreneurs within mixed-use buildings, which is the natural pattern of usage for multi-floored downtown buildings in most places, including Geneva (ibid., 26).

Part II of the Comprehensive Plan also delves into aspects of Goal 2: creating a downtown – and a street – that caters to all types of businesses, people, and groups, in an effort to combat perceived feelings of segregation. Today, the downtown is, by all accounts, experiencing a revitalization, with long-vacant storefronts finding businesses and apartments finding tenants (personal observation, 2014-2018; V. Pultinas, personal communication, February 2018). Roughly 10% (221, as of 2016) of Geneva’s businesses are located downtown, with retail, professional, and administrative specializations (czbLLC, 2016, ii, p. 16). Places for eating, entertainment, and nightlife are also bountiful downtown, particularly on the Eastern end of Castle (ibid.). Additionally, thirty new upstairs apartments were converted or created downtown during 2014, and all quickly found tenants, a sure indicator of an economic upswing (ibid., p. 17). The 2012 Downtown Revitalization Presentation also mentions further areas on the east end of Castle that ought to be targeted for re-development, including the Dove Block on the south east corner of Castle and Exchange Streets (Bergmann Associates, 2012).

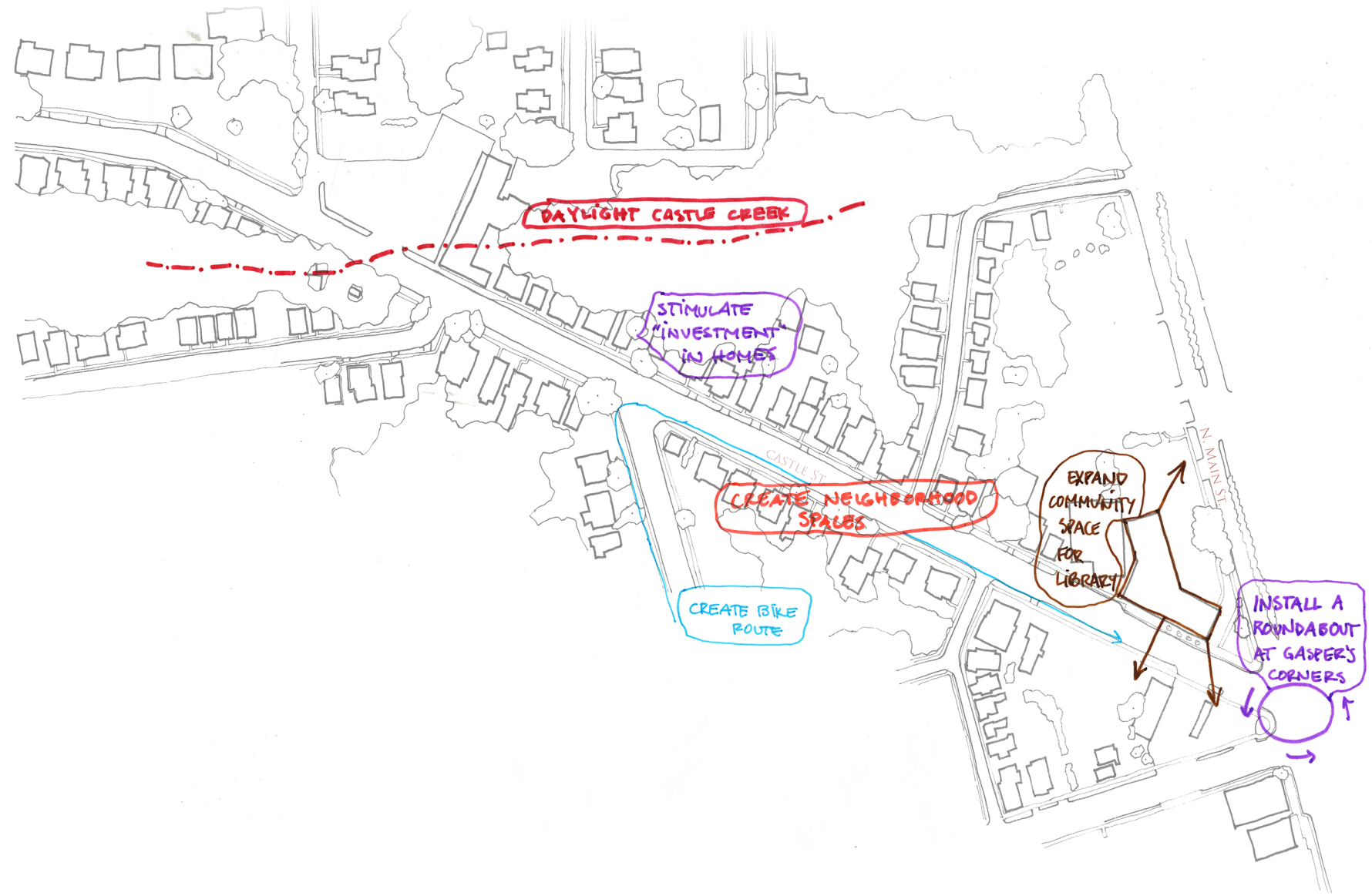
**FIGURE 13:
ACTIVE TRANSPORTATION PLAN MAPS**



However, this revitalization is coming with a price: the perceived exclusion of many groups with- in Geneva from their own downtown, a clear continuation of a legacy of segregation (Hayes-Conroy, et. al., 2016). Many older residents, for instance, express worries of “yuppies moving in,” with their conno- tation of expensive urban tastes that runs counter to many Genevans’ perceptions of their city; many minority groups express similar sentiments (ibid., p. 32). Additionally, many citizens have complained of a lack of non-alcoholic spaces and activities downtown, a condition that would potentially illustrate why many families leave Geneva (ibid., p. 14). In the words of one family-based resident: “There’s nothing to do downtown except skating and the Finger Lakes Lounge [on Seneca and Linden Streets], and those get boring after a while” (ibid., p. 15). Another resident has just expressed a wish for some place to “meet and relax after work” without having anything to drink (ibid.). Considering the abundance of buildings without occupants on Castle Street today -- particularly in the Dove Block, East Castle Street, and the buildings on the northeast side of Gasper’s Corners – it would be wise to incorporate this feedback in creating spaces that are interesting, welcoming, and accessible for all citizens in these spaces. In 2008, the Geneva Neighborhood Plan noted that “conventional urban functions cannot fill a downtown this large” in relation to Geneva’s population, and this feedback ought to be heeded to help develop spaces that are unique to this city (czbLLC, 2016, p. 31). The creation of an “entrepreneurship lab” through the HWS Colleges marks one such successful creative use of space, but the same amount of energy must be dedi- cated to developing businesses that cater to lower-income businesses and all demographics (Wickenden, 2017).

More directly related to this project, several of these documents have illustrated the immense amount of work and vast possibilities for improving the physical accessibility of downtown spaces, the essence of Goal 3. Some of the sidewalks are not well maintained, a symptom seen across the city; this is exacerbated during the winter, when snow is often not removed in a timely manner (Hayes-Conroy, 2016, p. 11; Bardon & Loguidice, 2017). Furthermore, the 2017 Active Transportation Plan blatantly illustrates the shortcomings of Castle Street in the downtown blocks both for walkers and pedestrians (Figures 13a & 13b). While the majority of Geneva’s streets garnered an “A” or “B” rating from the au- thors, Castle St. (particularly in the two-block stretch between the intersection with Main St. and Gene- see St. received a “C” rating for pedestrian traffic and a “D” rating for bicyclists (a statement I can testify to having ridden my bike to work through that corridor dozens of times) (Barton & Loguidice, 2017; personal observation, 2017-2018). Yet the 2016 Comprehensive Plan, along with the 2015 Walkability Plan, brings up ideas for implementing positive change in the pedestrian experience, suggesting creating a connection between Castle St. and the Farmer’s Market in the parking lot behind the buildings north of the street, and the possibilities of creating stops for a walking tour of the city’s strongest buildings, both for tourists and local pride (Genesee-Finger Lakes...Project, 2015, p. 6).

FIGURE 14:
GASPER'S CORNERS SUGGESTIONS



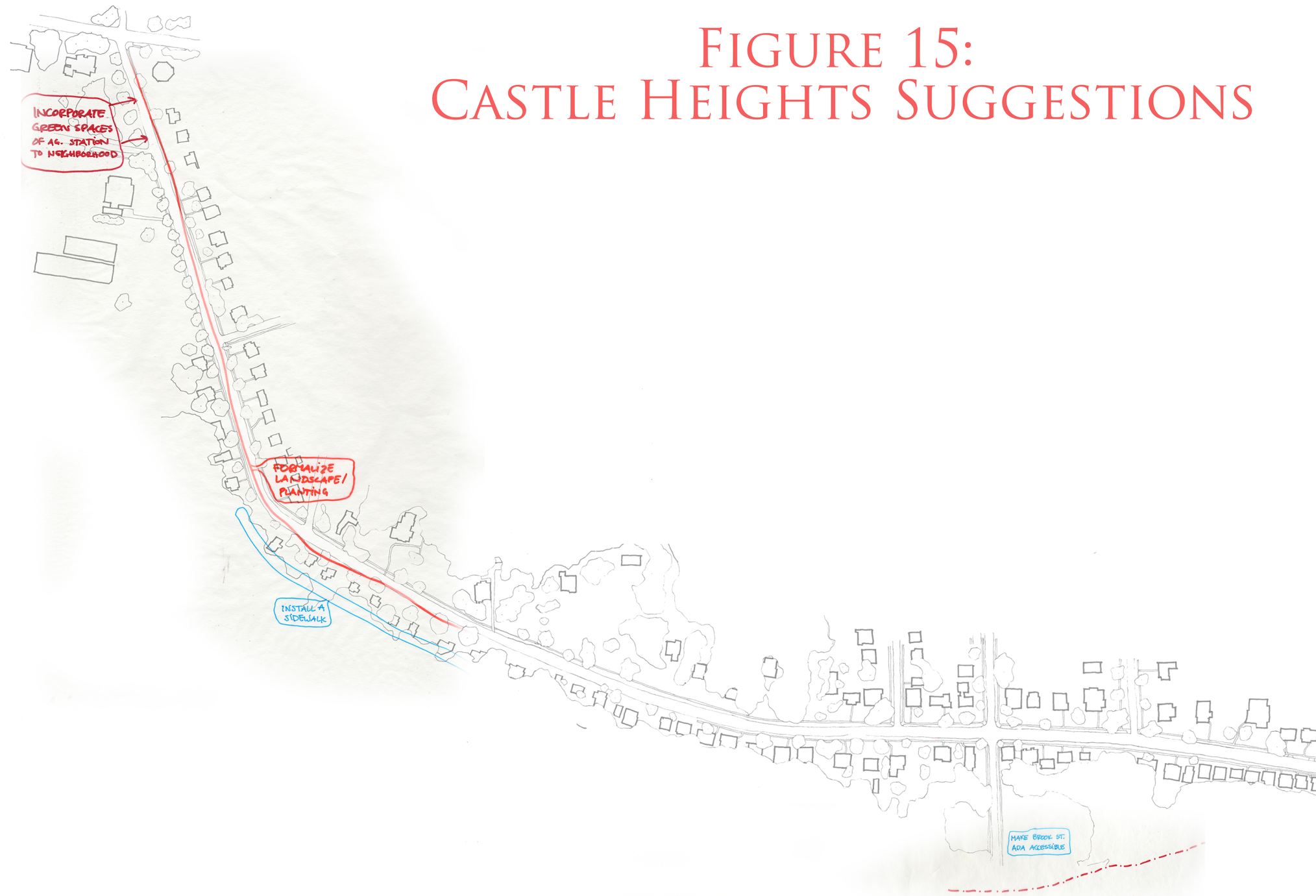
Precedent Plan Synthesis of Gasper's Corners District

In general, these documents mention very little about the “Gasper’s Corners District” between Castle Street’s intersection with Main Street and the west end of the old Market Basket strip mall plaza. All documents agree that this area of Castle is clearly in the worst shape economically; Section II of the 2016 Comprehensive Plan grades most of the buildings as being in “fair to poor condition” in contrast to the rest of the city, while the 2008 Neighborhood Study points out that this “once-desirable middle class area” now struggles without basic modern amenities such as garages (czbLLC, 2016; czbLLC, 2008, p. 37). The Neighborhood Study also compiled statistics about the homeowners who live around this area, which are summarized in Figures 16a-e (note that Castle Street in this section divides the Historic North and Hildreth Hill Districts, so I have included statistics from both surrounding neighborhoods). In general, the area has a lack of single family homes, a more diverse population, and higher rental and vacancy rates than the rest of the city, illustrating that Castle St. as a corridor engages with – and must respond appropriately to -- all levels of racial, economic, and social diversity (ibid., p. 36).

However, these documents do clearly point out (though not directly) that this small district is home to several of Geneva’s most important and defining landmarks: Castle Creek and the Geneva Public Library. As previously discussed, Castle Creek’s main interaction with Castle Street occurs along the old Market Basket plaza, which it flows beneath while crossing from the south side of the street to the north (Google Maps, 2018). However, the Comprehensive Plan only mentions that uncovering the creek would create an “urban environmental asset,” and fails to address any specifics of places or strategies for actually implementing the idea (czbLLC, 2016, p. 37). Furthermore, none of the documents at all address the old Market Basket parking lot -- which is typically mostly empty -- or the strip mall -- which only houses a laundromat and a new mini-mart (only steps from the mini mart at Byrne Dairy), a notable omission and an area that merits attention during the design phase of this project (personal observation, 2017-2018). Also, none of the plans address the diagonal intersection of Castle Street and Pulteney Street, a notable intersection for its potential role as a part of a new Route 14 bicycle route through Geneva (New York State Department of Transportation, n.d.)

Section III of the Comprehensive Plan does a phenomenal job detailing the community importance of the Public Library on the Northwest corner of Gasper’s Corners. It is one of the only (if not the only) places in the city where all citizens feel welcome, regardless of class, gender, age, or race (the epitome of Goal 2). According to interviews, residents use the library to socialize, study, gather for group events, study in solitude, and be entertained through activities like summer concerts and nutrition seminars (Hayes-Conroy, et. al, 2016, 18). However, another resident has pointed out that the library is “too small for the community,” a sentiment backed up by personal experience attending events there both indoors and outdoors (--, 19). Considering that the Neighborhood Study recommended spaces that facilitate community involvement in the face of increased time spent indoors, the creation of an outdoor community space affiliated with the Public Library seems like a feature worthy of significant attention during the design phase, particularly with an abandoned lot and a gas station in spaces across the street (czbLLC 2008, 45). Additionally, the 2015 Walkability Plan (and later the 2016 Comprehensive Plan) have suggested the possibility of installing a roundabout at Gasper’s Corners to improve the pedestrian experience, another feature that merits consideration, and adds complexity to the design of this area (Genesee-Finger Lakes...Program 2015, 3).

FIGURE 15: CASTLE HEIGHTS SUGGESTIONS

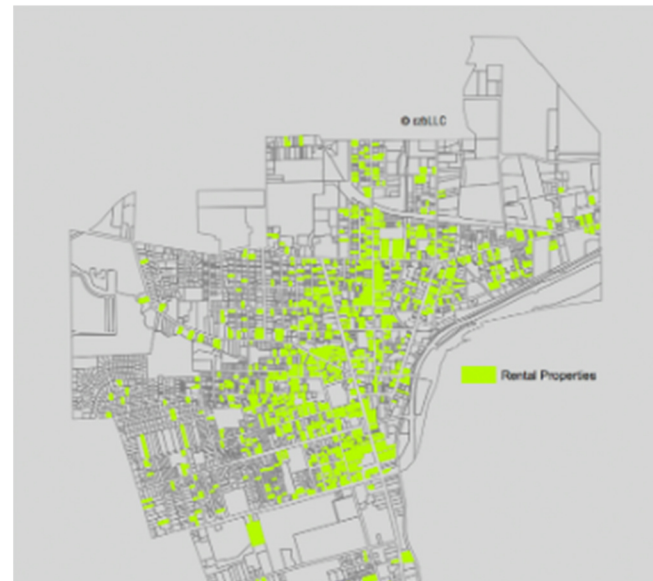
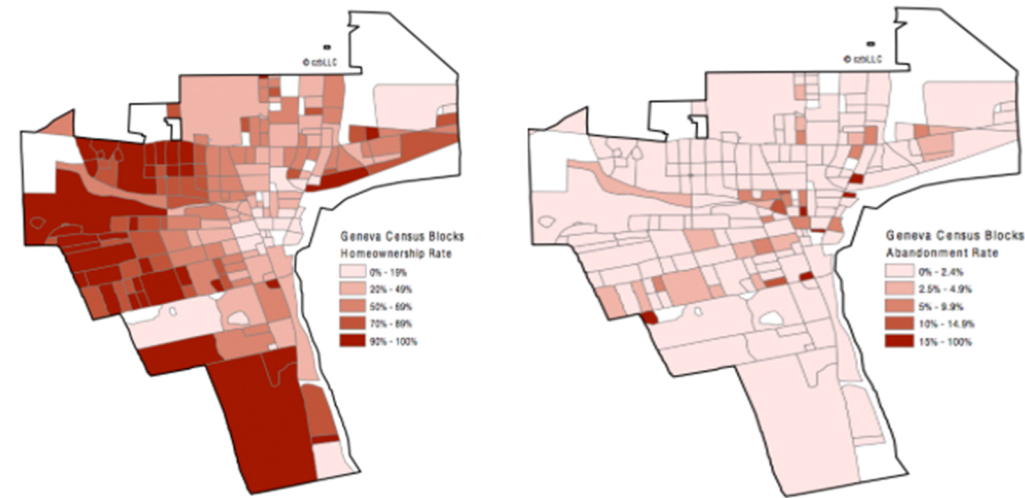


In direct contrast to the neighborhoods to its east, the Castle Heights District is filled with remnants of its golden age, with beautiful houses and tree-lined streets -- particularly Castle Street itself (personal observation, 2017). As Figures 16a-16e illustrate, the area is fairly wealthy, and consists of largely white homeowners (the negligible abandonment rate is primarily constituted of houses for sale) (czbLLC, 2008). However, the area still fails to attract and hold families, for several reasons, including the inability for double income families to find two viable jobs in the Geneva area (czbLLC, 2016, ii, p. 2). This contrasts with similarly wealthy areas closer to Rochester that lure residents who otherwise might call Castle Heights home (czbLLC, 2008, p. 14).

The other potential limiting feature of Castle Heights -- according to both the 2016 Comprehensive Plan and the 2008 Neighborhood Plan -- is its lack of connection to other local amenities, including the rather isolated Agricultural Station and to the Downtown and Lakefront districts. The development of Castle St. as a cohesive corridor, however, could help provide a clearer sense of connection between the Castle Heights neighborhood and the rest of the city, particularly with better bicycle and pedestrian pathways (and an infill on the missing sidewalk on the south side of the street west of Brook St.) (Genesee-Finger Lakes Program, 2015, p. 3). Overall, there are few suggestions within these documents for improving Castle Street in this district, but the emphasis is clearly on establishing a physical and theoretical sense of connection with the other districts on Castle Street as opposed to a creation of any new community spaces within the district. This is also supported by data collected by the Section III of the Comprehensive Plan, in which Castle Heights residents were the least enthused citizens about the creation of any new green public spaces (Hayes-Conroy, 2016, Addendum).



FIGURES 16A-E: 2008 NEIGHBORHOOD STUDY FINDINGS



Neighborhood	Population	% Black	% Hispanic	% Non-Hispanic White	% of Families Headed by Single Parent	Housing Units	Abandoned Units	Abandonment Rate	Home-ownership Rate	% of Householders 65+	% of Owners 65+
East Lakeview	1,383	28%	20%	51%	36%	555	11	2.0%	42%	27%	50%
Upper North	1,358	13%	12%	74%	26%	551	7	1.3%	47%	26%	29%
Historic North	1,359	11%	10%	74%	24%	640	5	0.8%	48%	24%	38%
Maxwell-Highland	1,363	1%	1%	95%	9%	594	2	0.3%	82%	35%	39%
The Arbors	881	6%	2%	90%	9%	381	0	0.0%	93%	36%	37%
Western View	663	4%	2%	91%	10%	265	7	2.6%	91%	39%	40%
City Central	1,234	19%	22%	55%	38%	718	32	4.5%	13%	32%	44%
Upper West	1,174	6%	3%	88%	17%	482	4	0.8%	73%	27%	31%
Washington Park	1,687	8%	6%	82%	27%	852	25	2.9%	44%	21%	29%
Historic South	309	4%	3%	89%	7%	162	1	0.6%	18%	14%	36%
South Lake	2,138	6%	5%	85%	26%	329	1	0.3%	49%	26%	36%

section iii: design development process

While Sections I and II examine the entire Castle Street Corridor, Sections III, IV, and V are focused primarily on the Downtown District of Castle Street, from the intersection of Main Street to Routes 5&20 (this site also overlaps with the Lakefront District as well). This decision was made for three primary reasons: 1) the Downtown District features the widest street sections, and offers the most complex and intriguing physical planning possibilities; 2) the Gasper's Corners district is the focus of another course I am currently enrolled in, entitled Sustainable Community Development Capstone; and 3) the time restraint of three months to fully develop and design a detailed site plan working as an individual undergraduate student encouraged me to focus on a more specific section of Castle Street instead of examining its entire length.

Components of Design Development

Overall, the design process for the Downtown District was a mixture of formalized research (based on Sections I and II), formal and informal conversations, precedent research and inspiration, and intensive site observation. Each of these aspects of design development are described below:

Analysis of Precedent Plan Ideas: As Section IV illustrates, many of the Physical Design Proposals are based on information gathered in Section II: Precedent Plan Synthesis. Indeed, the first step of design development was heavily focused on weighing the benefits and drawbacks of each of the suggestions outlined in Section II. While some precedent suggestions morphed into concrete proposals (implementing a median on Routes 5&20 to improve pedestrian access to Seneca Lake, for instance), other generalized precedent conclusions directly informed new proposals that were not mentioned in any previous reports (the creation of Urban Interaction Spaces in order to provide public space downtown for those not willing or able to spend money in businesses, for instance). Other suggestions mentioned in Section II were left out of Sections IV and V at the expense of ideas generated through other forms of design development. Additionally, information gathered in Section I: Historical Research directly informed several wayfinding proposals in Section V, particularly the strategy of employing historic signage to build community identity.

Informal Conversations: Informal conversations were a driving force for idea generation in this project, and reflect a bottom-up approach to designing public spaces. In general, Genevans are extremely passionate about their city, and very excited to join the conversation regarding its rehabilitation. Victor Pultinas, owner of Lake Drum Brewing on Castle Street, was particularly helpful in summarizing conversations he had heard over the years concerning the redevelopment of the street (the proposal for converting East Castle Street into a one-way corridor arose from a conversation with Victor). Frequent visits to Lake Drum Brewing also sparked conversation with longtime and new Geneva residents centered around the reimagining of the street; a conversation with City Councilman Mark Gramling at a music event also sparked ideas. Conversations with Hobart and William Smith office assistant Jean Salone, who grew up two streets over from Castle Street, were particularly useful for understanding historical context and reimagining how Castle Street might function as a primary corridor once again. Frequent informal conversations with Hobart and William Smith faculty, particularly Professors Robin Lewis, Kirin Makker, Hannah Dickinson, Gabriella D'Angelo, Patrick Kana, Jessica Hayes-Conroy, and Clifton Hood were particularly fruitful for idea generation and brainstorming. Additionally, informal brainstorming sessions with fellow Hobart and William Smith students Joseph Hayes, Brennon Coakley, Alexandra Azzam, Noah Rodwin, Morgan Gaudet, Aubrey Phillips, Edison Cabrera, Drew Scammell, Micah Lynch, and others, resulted in many new ideas and refined proposals. Conversations with fellow students Carly Kinta, Ainsley Rhodes, Sarita Sun, and Elizabeth McCabe in the Sustainable Community Development Capstone course also led to proposal developments that relate to both the Gasper's Corners District and to the Downtown District.

Formal Conversations: Formalized meetings provided context for current plans listed above, and also often resulted in new idea generation (the bicycle path proposal, for instance, stemmed from a formal interview). Interim City Manager Sage Gerling, in particular, provided up-to-date information about city properties and plans, and granted professional feedback on design development ideas during meetings in March 2017, January 2018, and March 2018. Mark Palmieri, director of the Geneva Business Improvement District, provided invaluable information and suggestions for improving and equifying the economic aspects of Downtown Geneva during a meeting in February 2018. Feedback during formalized design critiques in December 2017 from professional designers James Reynolds, Larissa Reynolds, and Emily Vollo, helped focus the scope of the project, and emphasized the importance of creative parking solutions. Finally, weekly meetings with adviser and Professor Jeffrey Blankenship provided expert feedback on design development ideas, and these conversations have the largest impact on the proposals listed in this report.

Site Observation: Beginning in May, 2017, and culminating in March, 2018, I have visited the Castle Street Corridor site at least 100 times, at all hours of the day between 7am and 11pm, and during all four seasons. Though I did not compile enough qualitative data regarding pedestrian, bicycle, and automotive traffic to generate comprehensive or specific conclusions about the traffic patterns within the site, I gained enough information about general trends of pedestrian and automotive movements within the site to propose decisions for crosswalk placement, road restrictions, parking space additions and removals, and sidewalk sizes that reflect user needs. This site observation also informed decisions regarding developing spaces that people will actually want to use, based on locations where people already informally gather and businesses that people frequent.

Online Precedent Research: Many of the ideas developed in the above stages of design development were altered and solidified through online precedent research. This included everything from inspiration from images of cities across the United States and in Europe (the proposal to transform Linden Street into a woonerf, and the proposal to include activities in the Verizon parking lot are examples of such inspiration), to specific recommendations for parking space arrangements, bicycle lane widths, and crosswalks. Many of the precedents listed throughout the proposals are also places I have personally visited, enabling a greater sense of whether or not these proposals could work in a city like Geneva.

Design Philosophy:

Overall, the design development process has resulted in a report that clearly prioritizes community involvement and creative, “outside the box” suggestions for reimagining downtown Castle Street. This approach was chosen because -- as an undergraduate student -- I have the freedom to propose more radical ideas than a professional firm, and -- as an involved resident of the City of Geneva and a member of Hobart and William Smith Colleges -- I have the resources available to gain a wide variety of perspectives related to the Castle Street Corridor. In sum, the goal of Sections IV and V of this report is to ask Geneva residents, students, and planners to imagine possibilities for this corridor that otherwise might be constricted by current economic realities and “this could never happen” attitudes. All of these proposals are firmly grounded in physical and programmatic reality, and -- with further development -- I believe that every proposal listed here could materialize in some form on the Castle Street Corridor in the future.

Limitations of Design Philosophy:

However, it is also important to recognize the limitations of such an idealistic approach to planning. Largely due to time restrictions, this report does not delve into the economic cost and feasibility of any of these proposals, which is the one of the most crucial selling points for any proposed redesign. Additionally, this report only briefly interacts with policy, and often proposes large-scale changes to the streetscape that would directly challenge State Historic Preservation Office guidelines (S. Gerling, personal communication, March 2018). The combination of these two limitations would make many of these proposals a difficult sell currently, but given the enthusiastic and motivating attitude that I have experienced when interacting with everyone from City Officials to residents to students, I believe that many of these proposals could serve as catalysts for generating the policy changes and economic funding necessary to make them a physical reality.

It is also important to recognize the limitations of my level of knowledge of urban planning, as this is the first detailed site plan project I have completed. Though I have made every effort to follow prescribed guidelines for dimensions of bicycle paths, sidewalks, parking spaces, and traffic lanes, I am sure that I have inevitably made mistakes that will be immediately identifiable to professionals well-versed in the field of urban design. Furthermore, working as an individual made pursuing a rigorous process of public participation impractical; though I attempted to reach as many audiences as possible through research and conversations, any further developed plans would require vetting through a more formalized public participation process. Additionally, I recognize that the addition of quantifiable studies of site traffic in this report would further the validity of proposals based on site observation patterns, though -- as stated above -- I believe these proposals are valid, as they directly based on over 100 hours of site observation. Overall, I hope that that these limitations do not detract from the proposals presented in the following sections, and that these ideas can be the foundation of a community conversation that embraces creative improvements to the Castle Street Corridor.

section iv: physical design proposals

As stated in the Introduction, the term ‘streetscape’ implies multiple user types, including pedestrians, bicyclists, and automotive traffic. Based on site observation of Castle Street, this section proposes six “Functional Zones” and describes in detail how the proposed final site plan reflects changes to each of these zones. Specifically, these six zones are:

Pedestrian: Sidewalks, Crosswalks, & Walking Streets

Public Interaction Space: Seating & Eating Spaces between Sidewalk and Street

Bicycle Infrastructure: Bicycle Paths & Bicycle Storage

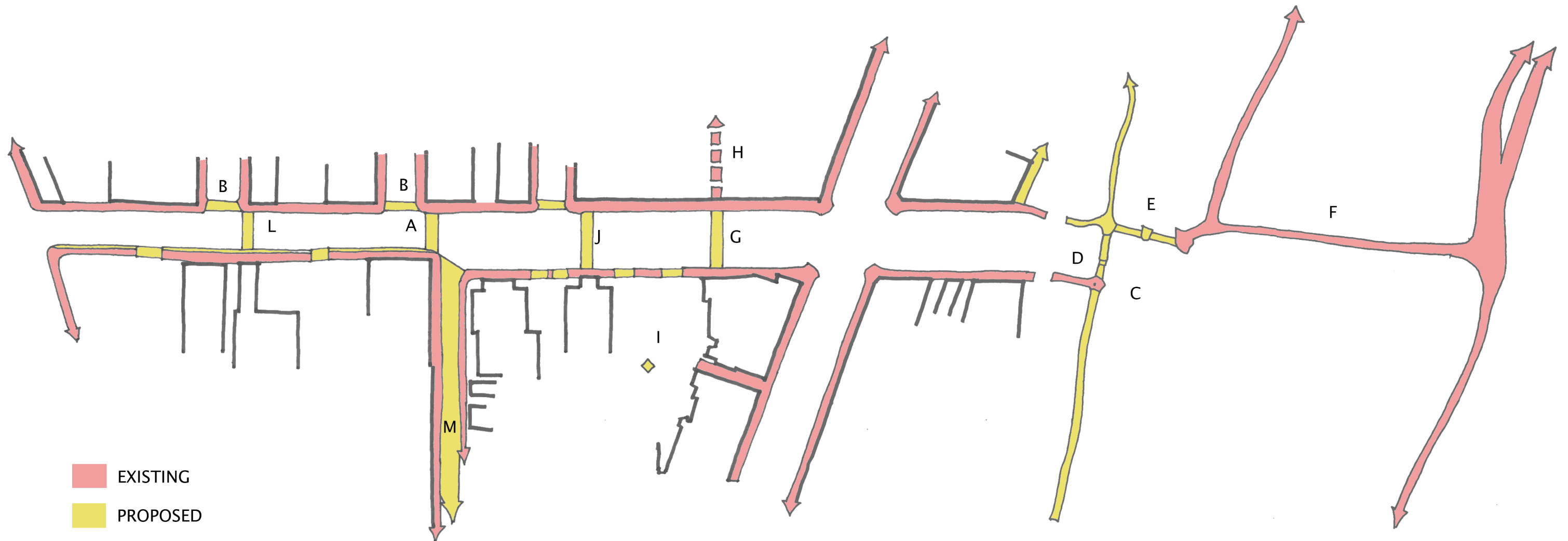
Automobile Parking: Angled Parking, Parallel Parking, & Parking Lots

Automobile Traffic: Lane Widths, Turning Lanes, Direction of Traffic

Green Spaces: Trees, Shrubs, Flowers, & Signage

As described in Section III, many of the following proposals for each zone directly relate to suggestions from Section II, while others were developed from new research.

ZONE 1: PEDESTRIAN EXPERIENCE



This zone improves the pedestrian experience in three distinct ways: streamlining east-west movement along the sidewalks on the north and south sides of the street, facilitating north-south crossing of the street through raised crosswalks, and converting Linden Street into a more pedestrian-friendly space through limiting automotive use. The improvements here directly address Goal 3: Accessibility from Section II of this report, and give some of the 17% of Geneva residents who walk to work a safer commute.

Proposal 1: Standardizing Sidewalk Widths. Nearly all of downtown Geneva (focused primarily on the five prominent streets -- Seneca, Main, Castle, Linden, and Exchange) has a standard sidewalk width of 9', a size that comfortably allows for two-way traffic (personal observation, September 2, 2017). However, the southern side of Castle Street between Linden Street and Main Street only has a 6 foot wide sidewalk, a product of the street narrowing from 90' to 63' in cross-section. Proposal 1 addresses this discrepancy by changing the sidewalk to the standard 9' wide, at the expense of roughly 3 parallel parking spaces on the north side of the street (A). This allows for a more cohesive pedestrian experience on both sides of the street throughout the entire site.

Proposal 2: Continuing Sidewalk Material in Crosswalks. This proposal addresses the experience of crossing driveways and streets that interrupt the east-west sidewalks. While the sidewalk material continues across driveways (illustrated by Image 1), it does not currently continue across Geneva, Genesee, and Elm Streets, forcing pedestrians to yield to cars before crossing these side streets (B). Proposal 2 calls for a continuation of the sidewalk material -- at the same level of the street -- to give drivers a small visual cue to yield to pedestrians before turning (Image 2 illustrates how Copenhagen effectively implements this continuation of material across roadways). This change promotes a sense of pedestrian safety when crossing these streets and a sense of continuity across the site.

Proposal 3: Crosswalk and Refuge Island for Routes 5&20 Crossing This proposal addresses the east-west crossing of Routes 5&20, described in Section II as a notably difficult intersection for pedestrians. Proposal 3 is a two-fold attempt at solving this issue without resorting to the bridge, which -- as mentioned earlier -- would cost between \$1.5 and \$4 million dollars (Shaw, 2010). The first component centers around policy and programmatic changes: reducing the speed limit on Routes 5&20 from 45 to 35 miles per hour, programming the streetlights to be more responsive to pedestrian inputs, and creating a 'road diet' of planters and narrower lanes, as suggested by several of the plans summarized in Section II (C). The second component includes two physical changes, designed to focus the pedestrian crossing on the northern side of the intersection. First, Proposal 3 turns the sidewalk on the southern side of Castle Street northward, promoting pedestrians to first cross Castle Street before crossing Routes 5&20 (D). This change promotes pedestrians only crossing the arterial on the northern side of the intersection, which would promote the design of a further developed and more visible crosswalk. This crossing would be supplemented by the creation of a pedestrian 'refuge island' (E) in the middle of Routes 5&20 to break the larger, 60' crossing into two more manageable segments (Image 3 illustrates this strategy). This crosswalk would be a natural continuation of the sidewalks in the downtown district towards the pathway to Seneca Lake that already exists on the northeast side of the intersection (F), promoting a fluid walk all across this site.

Proposal 4: Raised North-South Crosswalks. Personal observation has clearly demonstrated a need for improved pedestrian crossing across Castle Street. Particularly in the section between Linden Street and Exchange Street, pedestrians cross Castle Street in every direction, and at virtually every point. Proposal 4 addresses this issue through the creation of four raised crosswalks at strategic locations, with the intention of funneling pedestrians towards these particular crossing points (see Image 4 for an example from Melbourne, Australia). This proposal is heavily based on recently-implemented raised crosswalks on Pulteney Street on the Hobart and William Smith College campus, which have facilitated safe pedestrian crossing on a well-used street. Based on personal observation, automobile traffic virtually always stops for pedestrians, recognizing the visual cue of elevated sidewalks across the street to yield (Image 5).

The four locations are based on both visual and traffic pattern observations. The crosswalk at (G) visually connects with the tunnel (H) underneath buildings on the northern side of Castle Street, and physically addresses the need for a pedestrian crossing between the parking lot (I) on the southern side of Castle Street and the businesses on the northern side of Castle Street. This crosswalk would also connect downtown Castle Street to the Farmer's Market that occurs in the parking lot behind the tunnel. The crosswalk at (J) visually aligns with the entrance to Town Hall, and also addresses the need for crossing between the parking lot and businesses on the northern side of the street. The crosswalk at (K) visually continues the sidewalk on the western side of Linden Street, and would serve as the main point of crossing between the newly-proposed pedestrian-friendly zone (see Proposal 5) and the rest of Castle Street. The crosswalk at (L) visually continues the sidewalk on the eastern side of Elm Street, and connects the businesses on the northern side of Castle Street with parking on the southern side.

Proposal 5: Linden Street Pedestrian Zone. Though Linden Street (M) is technically not included in the Castle Street Corridor, Proposal 5 considers the possibilities available to the entire corridor if Linden Street transformed into a more pedestrian-friendly space. The City of Geneva has already experimented with closing down the street to automotive traffic during weekend nights, and Proposal 5 calls for a more permanent implementation of that policy (McCarthy, 2016). Specifically, Proposal 5 is inspired by the 'woonerf,' a dutch term for 'living street' (Hockenos, 2013). Image 6, an example of a woonerf in Seattle, WA, illustrates how these streets incorporate pedestrian, bicycle, and automotive traffic in one area, eliminating all physical barriers and forcing automotive traffic to entirely yield to pedestrian traffic, particularly if the entire street is paved in materials similar to a sidewalk (Hockenos, 2013). Image 7, Linden Street in San Francisco, illustrates how this type of design can be applied to a smaller street (PlaceLabs, 2018). Overall, this plan for turning Linden Street in Geneva into a 'woonerf' would enable businesses to expand their presence into the street, allow pedestrians to leisurely walk through the downtown district, and enable safer bicycle traffic, while still allowing the occasional service vehicle or resident to access the street (Hockenos, 2013).



Image 1: Sidewalk Surface Continuing Across Driveways on Castle Street. Google Maps, 2013



Image 2: Continuation of Pedestrian Surface across Roadways in Copenhagen, Denmark. Cally Labour Councillors, 2010.



Image 3: Simplifying Pedestrian Crossing through Incorporation of a Median. Federal Highway Administration, 2013



Image 4: Raised Crosswalk in Melbourne, Australia. Levinson, 2013



Image 5: Raised Crosswalk at Pulteney Street, Geneva, NY. Zach Felder, April 2018



Image 7: Woonerf-inspired Linden Street in San Francisco, CA. PlaceLab, 2018

ZONE 2: PUBLIC INTERACTION SPACES

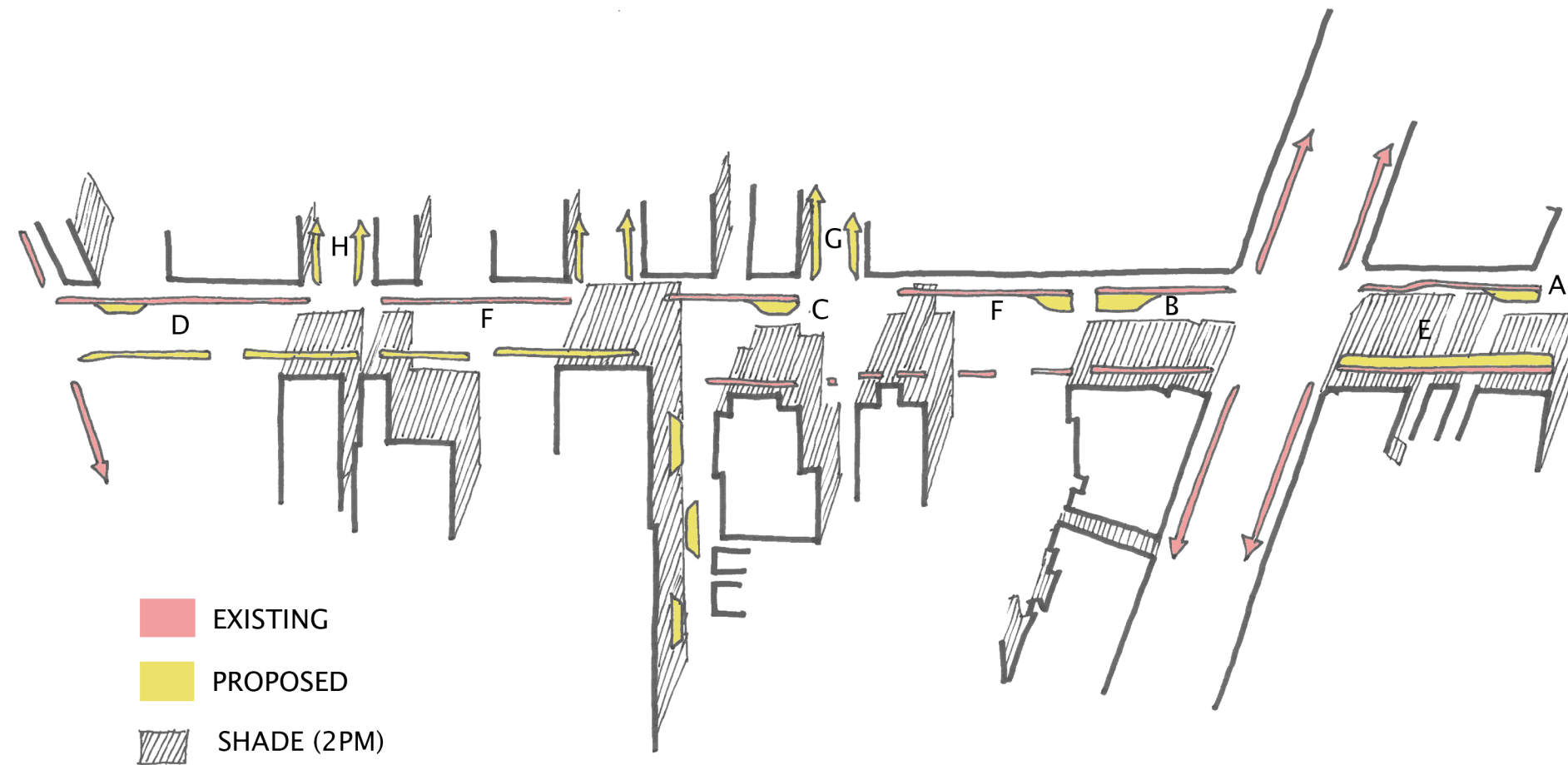


Image 8: Lake Drum Brewing Parklet. Victor Pultinas, 2015



Image 9: Parklet design in Los Angeles, CA. City of Los Angeles, 2018

Currently, most of Castle Street has a 6' wide space between the road and sidewalks that contains street trees, lampposts, and pedestrian and automotive signage. Though it is at the same level as the sidewalk, it is paved in uneven bricks and is completely underutilized. This section reimagines this space as a multi-purpose area that allows for seating, signage, lighting, bike parking, and other forms of wayfinding. Specifically, this zone addresses Goal 2: Community from Section II, as these public interaction spaces are designed to create community public spaces in the downtown area that do not require an entrance fee and are always open to community members.

Proposal 6: 13'-15' Wide Seating Bump-Outs. This proposal calls for several bump-outs of this multi-use area beyond the existing 6' wide sections. This is a direct response to a widespread feeling amongst Genevans that they do not have places to spend time downtown without having to spend money they either do not have or do not want to spend. However, by placing these 12-15' wide bump-outs on the opposite side of the sidewalk from businesses, people can utilize these seating spaces without necessarily having to purchase anything from the adjacent businesses (Lake Drum Brewing, which implemented a parklet in 2015 that is shown in Image 8, follows this design, and personal observation has clearly demonstrated that people often spend time in the parklet without necessarily purchasing anything from the bar). Of course, patrons of these shops and restaurants could also utilize these spaces, and the City of Geneva could follow a similar pattern to Ithaca, NY, which allows businesses to place some tables and/or clothing in these public spaces for an annual fee (City of Ithaca 2018). However, the City of Geneva would have to ensure that sufficient spaces are kept as fully public spaces in order to make downtown feel more welcoming to all.

Physically, these bump-outs are strategically located to take advantage of pedestrian traffic, complementary businesses, and sunlight. The bump-outs located at (A), (B), (C) and (D) are all located on the northern side of the street, taking advantage of the sunlight that comes from the south. Additionally, the bump-outs at (B), (C) and (D) are located outside several typically busy restaurants (Red Dove Tavern, GF, Pinky's, La Reyna del Mexico at (B) Char Burrito and Madi's Market at (C), and Man Yuan Asian Cuisine at (D)), which would allow for the mixing of patrons and general residents as described above. The bump-out at (A) is located to take advantage of the view from the downtown towards the lake, and would cater more towards general usage. The bump-out on the southern side of East Castle Street (E) is 13 feet wide for the entire area between Exchange Street and the Railroad, and is catered towards evening and night usage, since the main business -- Lake Drum Brewing -- is primarily open during those hours. Both of these bump-outs on East Castle, (A) and (E), will ideally promote the development of new businesses to fill this generally vacant area of the street.

Overall, these bump-outs would be designed as "permanent parklets," with inspiration from both Lake Drum's existing parklet and other parklets nationwide. Images 9 and 10 illustrate some particularly compelling examples that include creative seating designs, which should be a priority for the Castle Street Corridor, given that personal observation has often noticed people sitting on steps, planters, and railings in response to a lack of seating options. However, instead of being built off of a proposed prescribed design stated here, these bulb-outs would be a great opportunity for community involvement in the design process.

Proposal 7: Repurposing 6' Wide Public Interaction Spaces This proposal includes suggestions for ways of repurposing the 6' wide multi-use sections in between the bulb-outs. This area still needs to include streetlights (the existing structures are sufficient) and wayfinding signage (see Section IV for more on this), but the areas between these vertical structures needs to be entirely re-imagined. Image 11 illustrates an example in Los Angeles, California, where a multi-use space of roughly 6' has been transformed into a seating area, bike parking area, and green space. Incorporating creative waste reduction and collection strategies into this area could also help foster a community identity and improve the cleanliness of downtown (see Image 12 for the waste bins in East Aurora, NY that do both of the above). Though the entirety of this multi-use space will not be as densely packed as this image shows, clusters of such activity will allow businesses, patrons, and residents of Geneva to share a small public space alongside Castle Street. The continuation of this space onto side streets such as Geneva Street and Elm Street ((F) and (G), respectively) would allow for additional community space throughout the rest of downtown.



Image 10: Parklet design in Bethlehem, PA. Radzievich, 2017

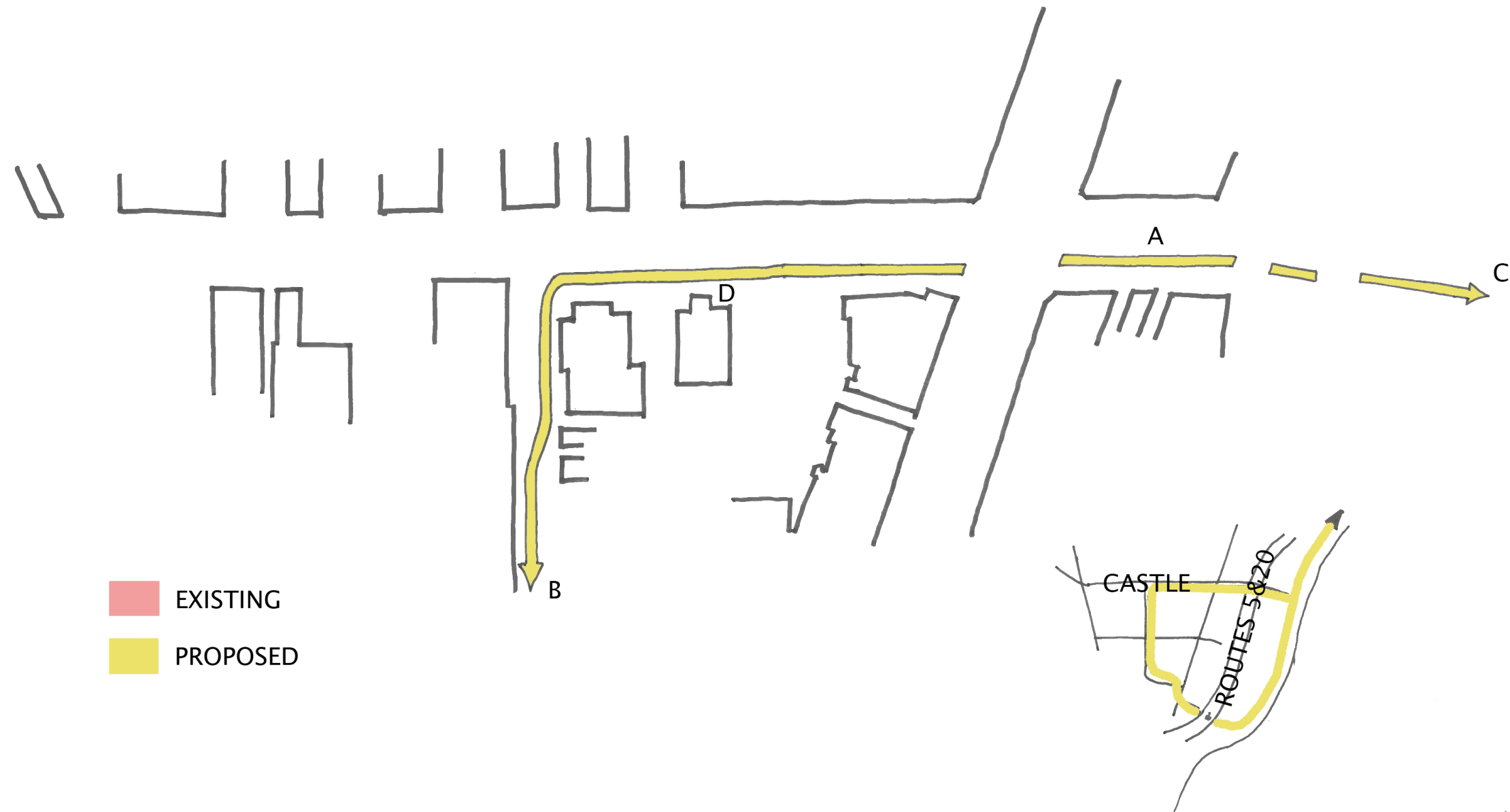


Image 11: Multi-Use Interaction Space in Los Angeles, CA. City of Los Angeles, 2018



Image 12: Waste Bins with Quotes from Famous Americans and Notable Hometown Leaders in East Aurora, NY. Zach Felder, 2017

ZONE 3: BICYCLE



As illustrated by the Active Transportation Plan in Section II, much of Castle Street is not regarded as a safe area for riding a bicycle. In fact, much of downtown Geneva shares this lower rating, particularly because cyclists do not feel safe on the roads, and cannot ride on the sidewalks (see Active Transportation Plan Map in Section II). However, as illustrated by Image 13, Geneva -- and Castle Street in particular -- is at the convergence of several major bicycle trails, including the Seneca-Cayuga Trail along the lakefront, and the Route 14 bicycle trail along Main Street. This section brings this “trail” idea into the downtown district, connecting these two trails in particular, and also develops suggestions for bicycle parking that is both practical and helps develop community identity. Overall, this section addresses Goal III: Accessibility from Section II, as it provides safer infrastructure for those who are not able to always drive to destinations.

Proposal 8: Downtown Bike Path Loop This proposal is the creation of a two-way bike path that links the lakefront bike path with the downtown district. While many reports (including the 2017 Active Transportation Plan) and projects (such as the aforementioned Pulteney Street redesign) simply propose slightly widened streets with bicycle insignia painted on the street, the reality is that many bicycle riders still do not feel safe in these environments (Christmas, et. al, 2010, p. 62; personal observation corroborates this research). However, a specially designated bicycle lane, with unique pavement and at a level distinctly separate from the road and the sidewalk, would allow bicyclists their own space for safe usage where they do not have to compete with cars for road space (see Image 14 for an example of this typology) (R. Frisk, personal communication, October 2016).

This proposal is ideal for the section of the Castle Street east of Linden Street where the streetscape width permits a 10’ two-way bike lane located next to the road (A). The path would be located on the southern side of the street to allow maximum amounts of space for pedestrian use on the sunnier northern side of the street; the path would also have the pavement material continue across any driveways and roads, similar to the crosswalks proposed in the Pedestrian Experience section above, allowing bicyclists an improved sense of safety throughout the entire path. However, the narrower width of the street between Linden Street and Main Street does not permit the extension of the bicycle lane further west, meaning that bicycles would have to share the road with automobiles in that section. Because of this restriction, the proposed bicycle path turns southward onto Linden Street, taking advantage of the proposed restrictions on cars to create a perception of safety for bicyclists. This path would then continue southward onto Scott Lafaro Boulevard, loop towards the proposed Solar Village, go through the existing tunnel underneath Routes 5 and 20, and rejoin the lakefront bike path. Overall, though this proposed path is by no means a full solution for bicycle traffic in downtown, it would at least provide a clearly articulated and safer incentive for bicyclists to use downtown streets, and the proposed loop would connect the lakefront, downtown, and the proposed solar village.

Proposal 9: Bicycle Storage Racks. This proposal specifically focuses on a component within Proposal 7: the bicycle racks. In order for people to get off their bicycles and utilize the downtown community spaces, businesses, and resources, they need places to park their bicycles; because the Community Multi-Use Area (Space 2) is located between the proposed bicycle path and the sidewalk, the inclusion of bicycle storage in this space makes perfect sense for the transition from biking to walking. Specifically, these ‘bicycle storage facilities’ would be evenly spaced out and located in each block of Castle Street.

The strength in this proposal is the opportunity for utilizing these bike racks for developing community identity, addressing Goal I: Heritage from Section II. Examples of creative bike racks are plentiful, but the racks developed by David Byrne for New York City (Image 15) are particularly successful for reflecting an area’s identity, as he designed them based on a defining characteristic of each neighborhood they would be placed in. The City of Geneva could work with the Public Art Committee to promote the creation of bicycle racks that specifically reflect Geneva’s cultural and geographical heritage, and the installation of such racks at prominent places (in front of City Hall, for instance) would send both a practical and ethical message that the city cares about promoting alternative forms of transportation.

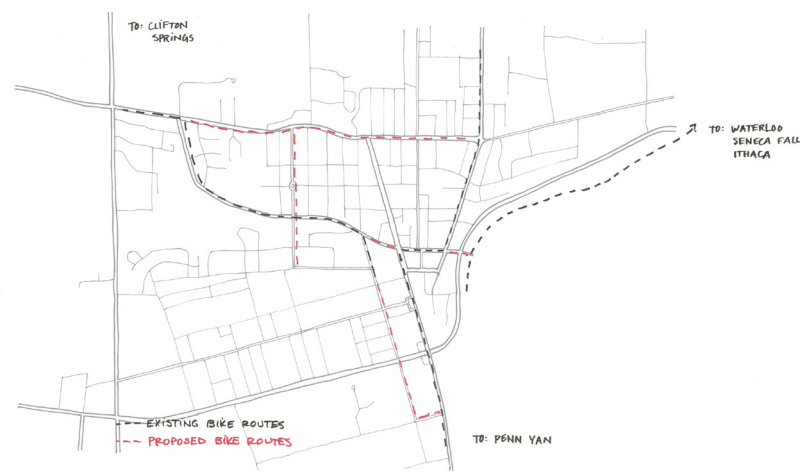


Image 13: Bicycle Trails in Geneva, NY. Drawn by Zach Felder based off New York State Department of Transportation Map (n.d.)



Image 14: Physically Separated Bike Lane in Urban Environment. Mel-low Johnny’s Bike Shop, n.d.

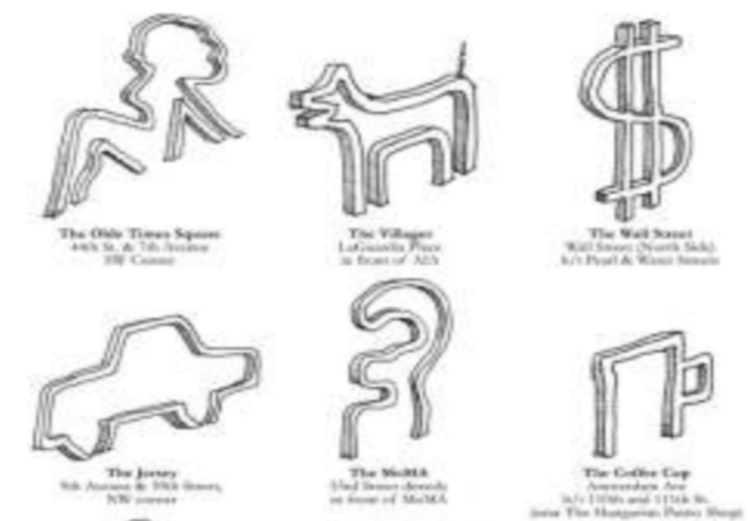
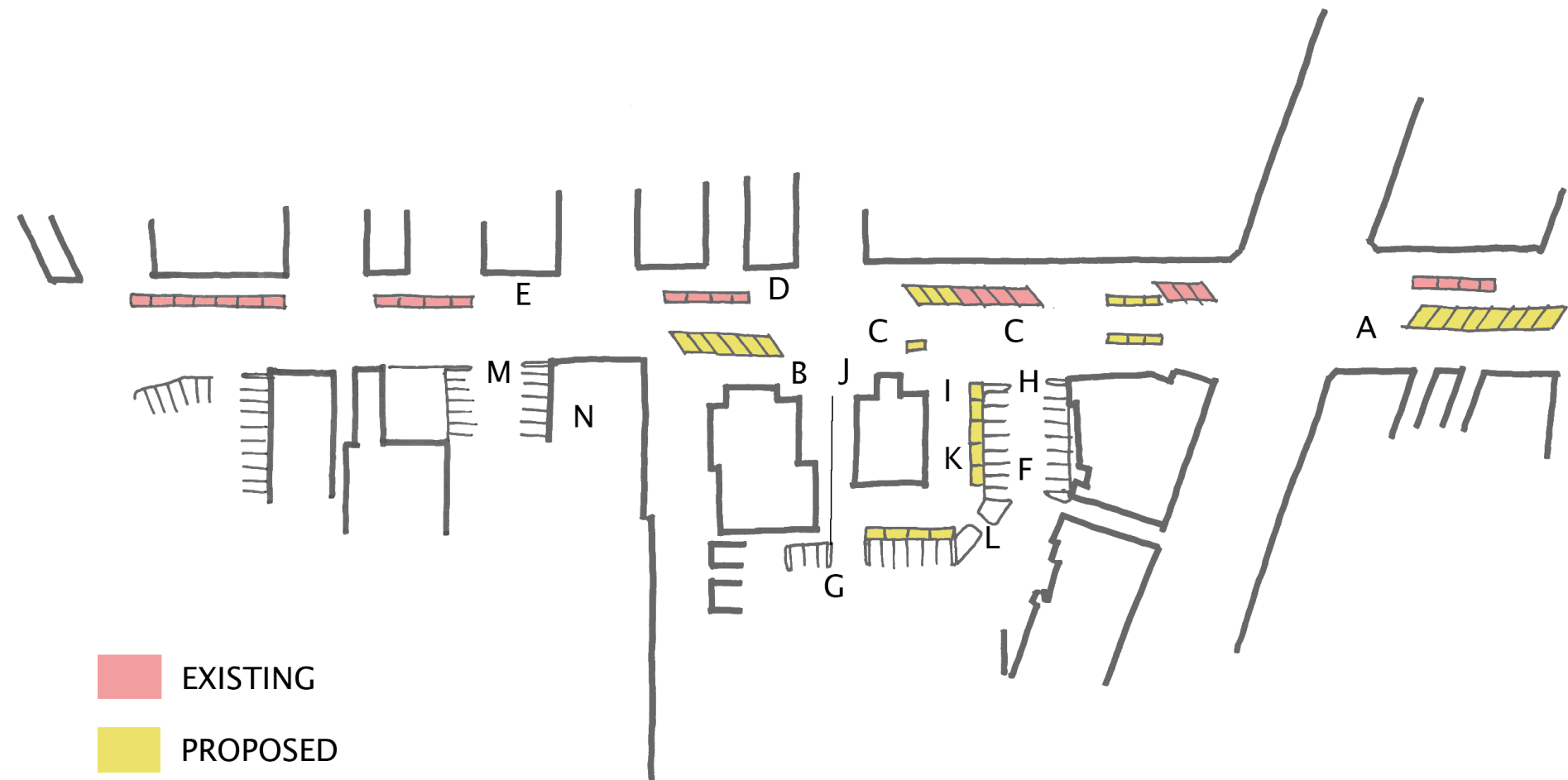


Image 15: David Byrne-designed Bicycle Rack Prototypes. Byrne, 2008

ZONE 4: AUTOMOBILE PARKING



Nearly every interview and informal conversation with a Genevan for this project ended up in a discussion regarding street parking downtown. Though everyone seems to have a different opinion, the most prevalent viewpoint is certainly that business owners need sufficient parking in order to sustain their economic viability; this proposed redesign takes that view heavily into consideration, and tries to preserve as many parking spots as possible while still improving the pedestrian and bicycle experiences. Currently, the downtown section of Castle Street has 57 parking spaces, with 45 parallel parking spaces and 12 angled spaces. The proposed redesign has 49 parking spaces, with 24 parallel parking spaces and 25 angled spaces. This is only a loss of eight spaces across a five-block site, and this section details the additions, subtractions, and alterations that resulted in that change. This section also proposes changes to two prominent parking lots located on the southern side of Castle Street.

Proposal 10: Angled Parking Additions This proposal creates more angled parking spaces on the southern side of the street, between Exchange Street and Routes 5&20, and outside the Post Office next to Linden Street. By converting East Castle Street into a one-way road, space is freed up to convert the six parallel parking spaces into ten angled parking spaces, a net gain that will be particularly practical when additional businesses move into the vacant buildings that line that block (A). By narrowing the street width from 19' to 12' outside the post office, the three parallel parking spaces can be converted into five angled parking spaces (B). These spaces would be 15-minute parking, and would accompany the existing 15-minute spaces located outside the post office and City Hall that have been filled every single time I observed the site between 9am and 5pm.

Proposal 11: Removal of Parallel Parking Spaces. This proposal removes selected parallel parking spaces in order to improve the other five 'Functional Zones' discussed here in Section IV. Several spaces are eliminated on the southern side of Castle Street between Exchange Street and Linden Street (C) in favor of green spaces, a crosswalk, and wayfinding. Two spaces are eliminated on the northern side of Castle Street in between Genesee Street and Geneva Street (D) in favor of an improved Community Area. Finally, three more parallel parking spaces are eliminated on the northern side of Castle Street between Genesee Street and Elm Street (E) to accommodate an enlarged sidewalk on the southern side of the street and a left turning lane onto Genesee Street.

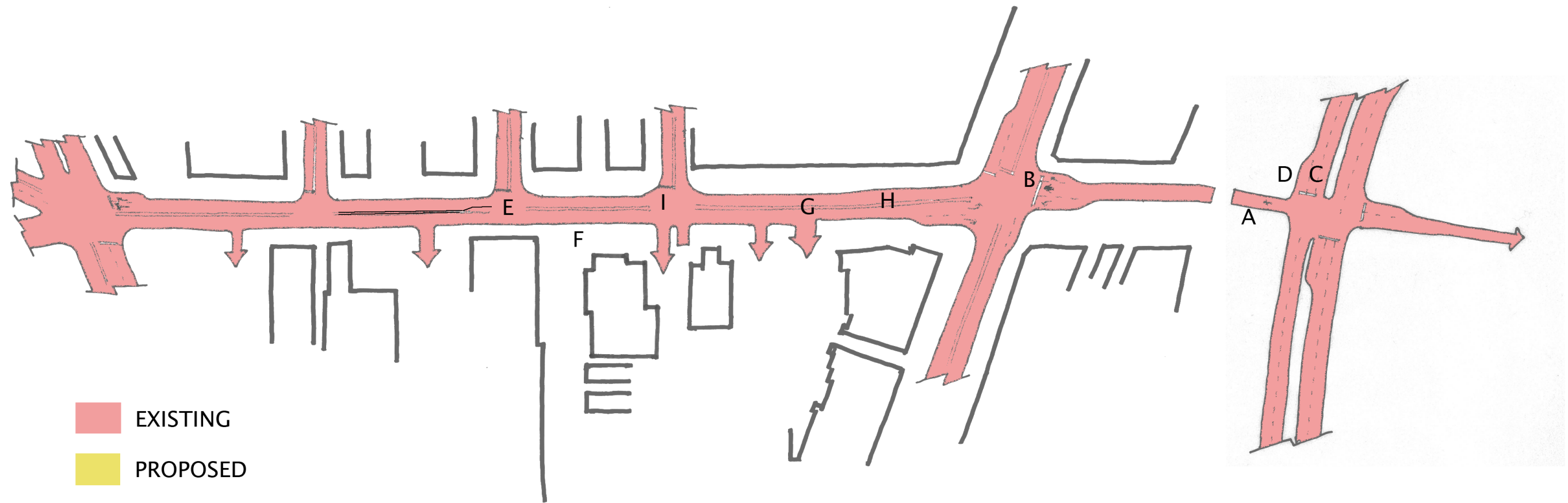
Proposal 12: Rearranging City Hall Parking Lot. This proposal redesigns the parking lot between Lyons National Bank and City Hall on the southern side of Castle Street. Currently, the parking lot is a combination of paved and lined areas (F), and completely disorganized gravel areas behind City Hall and next to the backs of buildings (G). The new proposal calls for the separation of the parking lot into two separate one-way paths (H & I) entering from the eastern side of City Hall that come together to exit on the eastern side of City Hall (J). The outside loop (H) would be parking for employees, residents, and others intending to spend several hours at their destinations. The inside loop (I) would serve as an extension of short-term parking (less than one hour) from the street, and would also serve as a direct entrance to the proposed handicapped addition onto City Hall (K). The landscaped median and path at (L) would allow for smoother pedestrian crossing between these two loops.

Proposal 13: Activating the Verizon Parking Lot. This proposal reimagines the parking lot on the southern side of Castle Street between Linden Street and Main Street (M). This parking lot is currently owned by Verizon, and is roped off to community use until further notice (S. Gerling, personal communication, January 17, 2017). However, this proposal imagines how the parking lot might be utilized if it became available to employees and the general public. For instance, many cities have partnered with or leased from private companies to open up parking lots to community use during hours other than the typical 9-5 workday (Nelson-Nygaard, 2015, p. 10). These partnerships have been successful in cities like Oak Park, IL, Cambridge, MA, and Berkeley, CA; however, a city like Geneva might have difficulty implementing such a program because parking fees are often the only way for a city to justify leasing parking spaces from a private entity, and Geneva currently has only free parking (Litman, 2016). However, due to the loss of parking on Linden Street (see Proposal 5), this is an idea the City of Geneva ought to pursue in further detail. Additionally, the city could consider installing hardscape sports areas in this site, spaces that could still remain as parking spots during the weekdays but could also function as community gathering spaces during weekends and summer nights (and take advantage of the mural adorning the western facade of the building housing Kashong Creek Brewing (Q)). Sonder Boulevard in Copenhagen provides a great example of this type of hardscape design, with outdoor ping pong tables, basketball courts, and other sports facilities located in the heart of an urban environment (see Image 16) (personal observation, November, 2016). This type of activity center would also ameliorate the issue of having activities for children and adults downtown on weekends and in the evenings, and directly address Goal 2: Community from Section II.



Image 16: Outdoor Table Tennis on Sonder Boulevard in Copenhagen, Denmark. Google Maps, 2017

ZONE 5: AUTOMOBILE TRAFFIC



Overall, this proposed redesign drastically reduces the lane widths in the downtown district in order to make room for improvements in the other five spaces. In general, lane widths have been reduced to a standard 12', with turning lanes being slightly narrower; many turning lanes have also been removed based on observation and site analysis of user need. Also, East Castle Street has been reduced to one-way traffic, and Linden Street has had traffic capacity significantly reduced (see Proposal 5). The following section details these changes.

Proposal 14: Converting East Castle Street into One-Way Traffic. This is the most radical change in the entire proposed redesign: transforming East Castle Street into a one-way street, where traffic can only drive westerly, which facilitates drastic improvements in parking, bicycle infrastructure, and community multi-use space, as detailed in previous zones. This idea, initially developed in a conversation with Victor Pultinas, owner of Lake Drum Brewery, is made possible by several other automotive-related changes. First, the implementation of a traffic signal at Elizabeth Blackwell Street and Routes 5&20 (to the south of Castle Street) and the improvement of the intersection at Lake Street and Routes 5&20 (to the north of Castle Street) allows easterly traffic from downtown to still have a safe opportunity to access Routes 5&20. Secondly, the implementation of two turning lanes (both right and left turning) at the intersection of Castle Street and Exchange Street (A) prevents traffic backup down the one-way street, which would make parking quite difficult.

While the decision to create a one-way street has clear benefits, the decision over whether to allow traffic to flow easterly or westerly is far more complicated. The primary benefit of eastbound traffic would be the elimination of turning lanes on Routes 5&20 (B), since traffic could no longer turn onto Castle Street. This would then allow for a shorter pedestrian crossing by 10'. However, the decision to only allow westbound traffic on this section was made to facilitate increased traffic flow into downtown from Routes 5&20. With trees and green spaces in the foreground (C), and a streetscape lined with historical buildings in the background, the visual approach of Castle Street viewed from Routes 5&20 and the lake would be quite inviting, and the westbound one-way street would allow traffic to enter downtown through this corridor.

Proposal 15: Elimination of Turning Lanes. This proposal reduces turning lanes and center lanes in the central block of Castle Street (Linden Street to Exchange Street) to allow for more pedestrian and bicycle space at the edges of the road. The turning lane at Genesee Street (D) remains, as personal observation has shown that the turning lane is often filled with 2-3 cars at red lights. However, the turning lane towards Linden Street has been removed (E), as Linden Street no longer promotes automotive traffic. The turning lanes onto Geneva Street and into the parking lots (F) on the southern side of Castle Street have also been removed, as personal observation has shown that they are rarely, if ever, filled. Finally, the eastbound straight lane at the intersection of Castle Street and Exchange Street has been eliminated, as traffic going in that direction can no longer use East Castle Street.

Proposal 16: Standardization of Lane Width. This proposal calls for the regulation of all lanes at a 12' wide maximum, eliminating areas where the road width is currently over 15' and up to 19' (G, H). This width is a standard for urban streets, and -- though it is slightly over the 11' width suggested by more progressive city planners -- provides enough room for navigating backing out of angled parking (National Association of City Transport Officials 2018). Along with Proposal 15, this allows additional room for the other "spaces" on the outside of the street, while easing the north-south crossing of Castle Street for pedestrians by reducing the lane width.

ZONE 6: GREEN SPACE NODES



Currently, the only 'green' spaces on Castle Street are trees located within the multi-use space in between the sidewalk and the street. While some of these trees are fully-grown and prospering (generally in area (A)), the majority of these trees are planted in 3' by 3' grates, and are only 20-30' tall (some are dying and shorter) (B) (personal observation, January 2018). This section proposes more developed green spaces that feature trees, shrubs, and flowers, and allow for filtering of rainwater into an otherwise hardscaped environment. This zone addresses Goal 1: Heritage from Section II by proposing a connection to Geneva's agricultural and environmental history within the heart of the urban downtown; additionally, these spaces could complement the Public Interaction Spaces discussed above, and function to improve community interaction, addressing Goal 2: Community from Section II.

Proposal 17: Green Space Bump-Outs. This proposal includes ten of these green spaces at ten specific locations within the site. In general, these spaces are located at corners of intersecting side streets, to provide a buffer between turning cars and adjacent crosswalks or multi-use spaces. These larger green spaces (B, C, D, E, for instance), would allow for trees, shrubs, and smaller flowers; the smaller green spaces (F, G, H) would allow for shorter trees and shrubs, as well as wayfinding signage, as discussed in Section IV. This signage and environmental area would be particularly valued at sites (B) and (C), which are located directly outside City Hall in a high traffic area, and across from the proposed Community Multi-Use Areas. Much like the bicycle storage facilities in Proposal 9, these spaces would not only be practical but would also illustrate that Geneva cares about the protecting the environment, particularly in an urban setting. The creation of a larger green space with trees and wayfinding signage at the southeast corner of the intersection of Main Street and Castle Street (D) would also function to define an otherwise overlooked corner that is located at the former 'entrance' to downtown that was once known as Gasper's Corners. Additionally, the practical benefits of such green spaces are well-published, and include reduction of heat, rainwater filtering, and aesthetic improvement (Project Evergreen, 2018)

section v: wayfinding proposals

This section proposes improved wayfinding strategies for downtown Geneva, with an emphasis on Castle Street. The proposals stated here were developed primarily through online research, group work, and individual brainstorming, and many of these proposals are attempts to think “outside the box” for more creative solutions that are consequently without precedent. This section includes an introduction to the term “wayfinding,” a brief analysis of existing signage on Castle Street, and a series of physical proposals for further improving wayfinding on this site. Overall, this section directly addresses all 3 Goals from Section II, as the signage contributes to developing and recognizing Geneva’s heritage (Goal 1), the destination mapping and signage increases the visibility of community spaces (Goal 2), and the standardization of signage improves and streamlines the accessibility of downtown spaces for multiple modes of transportation (Goal 3).

Introduction to Wayfinding

The term “wayfinding” refers to systems of visual information that “guide people through a physical environment” by “making a complex reality easily digestible” (Society for Experiential Graphic Design, 2014; Badger, 2012). Whether in an airport, shopping mall, or city, people interpret their surroundings both to evaluate what attractions or destinations exist around them, and to figure out how to best get from their current location to those destinations. Between the usage of effective signage, lighting, pavements, maps, and other spatial features, successful urban wayfinding can turn a complicated city into an easily navigable and understandable entity for both visitors and locals (Badger, 2012). In the words of the Society for Experiential Graphic Design, successful wayfinding techniques essentially can enable people to “create mental maps” of their surroundings (Society for Experiential Graphic Design, 2014). Ever since the dominance of the automobile in the mid-20th-century, wayfinding has often been associated primarily with road signs, the epitome of navigational aids; however, recent trends – beginning in the late 1980s – have embraced a multi-modal approach, incorporating wayfinding measures for pedestrians, bicyclists, automobiles, and public transit users alike (Herbes, n.d.).

According to Emily Badger (2012), “well-designed places” give users “an intuitive understanding” of spaces, reducing the need for actual signs. For instance, she points out that paving patterns dictate where certain modes of transportation ought to feel welcome (sidewalks and crosswalks are for pedestrians, e.g.), public art ought to help citizens direct their attention to important areas, and lighting often indicates where people ought to feel safe, particularly at night. Yet the reality is that signs – and more than a few of them -- are a necessity for successful wayfinding, along with these other features (Joel Katz Design Associates 2013). However, as anyone who has ventured through an urban environment can attest, signs can often be contradictory, cluttered, and flat out confusing when not constructed thoughtfully, cohesively, or practically.

According to Brian Herbes (n.d.), successful signs tell people “the right information at the right time,” and nothing else. They inform citizens of destinations (businesses, landmarks, districts, etc.), practicalities (parking, bathrooms, etc.), and strategies for getting to various places (available methods of transportation, times, safe paths, etc.). Additionally, Herbes points out that successful wayfinding signage exists not only at destinations and public transit hubs, but also at “indecision points,” which can be discovered through studying movement patterns and anticipating areas without adequate signage (n.d.). Additionally, the Sign Research Foundation points out that successful wayfinding signage allows people to discover “what we cannot with smartphones or online” (2013, p. 5). They illustrate that signage targeting out of the way and “complementary destinations” can boost attendance of community events (citing a 10% increase in businesses that situation in Lancaster, PA, in 1999), an economic reason to justify the creation of improved wayfinding (ibid, p. 9).

Analysis of Existing Signage

In January, 2018, I conducted a survey of every sign on the Castle Street Corridor, and came to some conclusions about existing signage (selected images from this survey are at the end of Section V) (All photos by Zach Felder).

60% of signs are prohibitive in their language, meaning that they tell users where not to go and what not to do. “No parking” signs (Image 1), restrictive parking signs (15 minute maximum, for instance) (Image 2), and “no bicycle riding on the sidewalk” (Image 3) signs are the best examples of this.

The vast majority of signage is catered towards automotive traffic, including one-way signs, numbered route signs, and parking-related signs (Images 4-6). There is only one small sign for bicycle traffic (Image 7), and several for pedestrian crossings.

Existing pedestrian signage is outdated, not visually cohesive, and even peeling at certain locations (Image 8). This makes the pedestrian experience unpleasant and even unsafe at points.

Destination signage (as recommended extensively in the section above) is not visually cohesive, is very spread out, and generally does not cater to pedestrians. The two destination signs that do cater towards pedestrians only read “Check Google Maps for Geneva’s Latest Offerings,” and offer no actual help for locating destinations (and assume that users have access to the internet -- a dangerous assumption) (Image 9).



Image 1: No Parking Sign



Image 4: One Way Sign



Image 7: Route 14 Bicycle Sign



Image 2: Restricted Parking Sign



Image 5: Route Signs



Image 8: Peeling Crosswalk Signage



Image 3: No Bicycling on Sidewalk Sign



Image 6: No Parking Sign

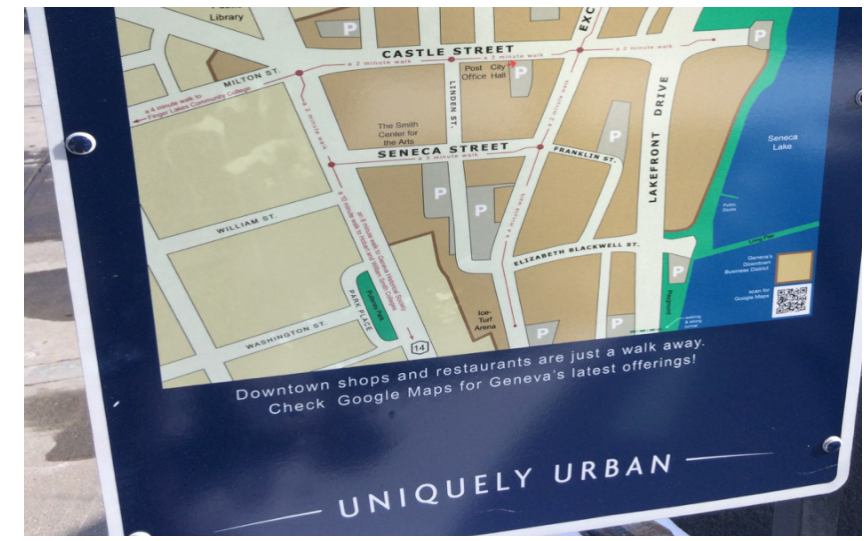


Image 9: "Uniquely Urban Destination" Sign

Proposed Improvements

As described above, wayfinding is equally about physical infrastructure and signage; the signage proposals in this section are therefore meant to complement the physical and programmatic proposals listed in Section IV in hopes of creating an easily navigable downtown for pedestrians, bicyclists, and automobile traffic. Overall, these signs would be placed in Green Spaces and in the Public Interaction Spaces at locations strategically chosen to reach the most traffic, and would be sure to address the needs of both tourists and residents. The content of these signs would primarily focus on promoting destinations, businesses, and public spaces, and would direct people towards places rather than only restricting them from certain activities. The following proposals are strategies for creating more interesting and creative signage in the Castle Street site in particular.

Proposal 18: Historic Signage This proposal creates signage that recognizes the historic heritage of Castle Street. This idea is based on the 1996 wayfinding program titled Walk!Philadelphia, which relied heavily on promoting history to get both residents and locals more interested in the city (Joel Katz Associates, 2013). For instance, bus stops were covered in historical articles or fact sheets that read “On this block in 1823...” (ibid.). Geneva could implement a similar system of historical signage, and this could be shown on everything from bicycle storage racks to waste receptacles to conventional wayfinding signage. Much of the information included in Section I of this report could be featured on these signs in the form of text and images, and would allow Genevans and visitors to place Castle Street today in the context of its industrial past (on the entire Castle Street Corridor, different signage would correspond with each district’s unique heritage). Additionally, some marking on the street illustrating the previous path of the railway would be a creative and informative way to incorporate history into current design.

Proposal 19: 8 Wayfinding Trails. This proposal creates eight specific wayfinding “trails” that would allow users to become more aware of public spaces, destinations, amenities, and businesses within Geneva through the linking of similar types of places. Though these trails would stretch throughout the entire city (and perhaps the Finger Lakes Region), this report focuses specifically on how these trails would manifest the Castle Street Site. Physically, these trails would exist through color-coded signage and handheld maps (see Proposals 21 and 22 for additional information). This idea is heavily based on the existing Finger Lakes Beer and Wine Trails, which -- although they have been successful in improving business for wineries and breweries -- are limiting in their audience, as they only appeal to those who drink alcoholic beverages (V. Pultinas, personal communication, February 2018). This proposal is also inspired by a wayfinding system implemented in 2014 by the City of Ithaca, NY, and surrounding Tompkins County, which includes trails that appeal to people interested in history, business, environmental areas, and the local university and college (Peter J. Smith Associates, 2014). See next page for details on this proposal.

Proposal 20: 24-Hour Clock Motif. This proposal relates to the visual language of the wayfinding signage. Because so many businesses in Geneva (and most places) are only open during specific times of day, this proposal calls for a stylized diurnal (24-hour) clock on signs that is color coded based on the time of day. The clock would have one rotating hand that would point to the time of day and its corresponding color, and each business listed on the sign would have a range of colors illustrating the times that it is open. This would appeal to visitors simply looking for things to do at a specific time of day, and could also be referenced by locals for learning what hours various businesses are open. Though this idea is clearly still in the development phase, it would be an interesting complement to existing “uniquely urban” signage, and would provide a framework for including specific businesses on signage instead of simply encouraging users to reference Google Maps (see vignette on Site Plan for detail of this proposal).

Proposal 21: Locations of Wayfinding Signage. This proposal explores specific places for implementing wayfinding signage. By placing the signage in the Community Multi-Use Space, the signs can cater to all types of traffic, with smaller, lower signs facing pedestrian spaces and larger, higher signs catering to automotive traffic (this is a strategy initially developed in the Walk!Philadelphia 1996 plan) (Joel Katz Associates, 2013). In general, new and clearly-designed movement-based signs would remain in similar locations to current signage, with traffic signs that include parking recommendations, parking restrictions, one-way signs, and route information placed around intersections, and pedestrian crossing signs located at crosswalks. However, additional signage would be required at the four crosswalks detailed in Proposal 4, in order to increase safety of pedestrian crossings (Levinson, 2018). The destination signs detailed in Proposals 19 and 20 would be placed at several strategic locations in the Castle Street Site, as illustrated by Figure 1. The sign at (A) would illustrate the amenities available downtown to visitors at the lakefront, and would be complemented by another similar sign directly located at the shoreline. The sign at (B) would appeal to visitors at the intersection of the City Hall, the primary downtown parking lot discussed in Proposal 12, and the plethora of restaurants located on the north side of Castle. The sign at (C) would help solidify the southeast corner of Gasper’s Corners, and help entice locals and visitors to move into the downtown district. Smaller signs with a similar typology would be implemented at several other locations in this site, taking advantage of Multi-Use areas and pedestrian-friendly zones. These locations include (D) and (E) on East Castle Street, (F) and (G) on prominent corners on the north side of Castle Street, and (H) on the newly-redesigned Linden Street.

Proposal 22: Mapping Wayfinding. This proposal essentially transforms the signage discussed in Proposal 21 into paper and digital mapping. While signage in the physical environment is a key component of wayfinding, many people refer to maps to guide their explorations of urban environments (Society for Experiential Graphic Design, 2014; Greater Meredith Program, 2018). This map and pamphlet would include the same clock graphic, as well as a listing and map of all eight proposed trails, and a complete list of all businesses in downtown Geneva, in order to be visually coherent with physical signage (the design of the Indianapolis Cultural Trail is a useful precedent for mapping of separate trails based on desired experience) (Indianapolis Cultural Trail, 2018). These maps would be in physical form at key locations around Castle Street, and would also be accessible to users through the Geneva City website.

TRAIL	GOAL	AUDIENCE	CASTLE ST. DESTINATIONS
entrepreneurial	To highlight businesses started by local entrepreneurs, and spaces that can help budding entrepreneurs develop their ideas.	Geneva residents interested in creating or supporting new homegrown businesses.	Lake Drum Brewing, Port 100 Coworking Community, Hobart and William Smith Colleges Entrepreneurial Studies Incubator
shopping	To promote the selection of businesses in Geneva for buying gifts and other non-essential goods.	Tourists and Geneva residents interested in buying goods locally.	Lake City Hobby, Finger Lakes Lounge (on Linden Street), Simply Sweets
outdoor	To connect spaces that encourage outdoor play, exploration, and relaxation in the urban environment	Genevans and visitors looking for relaxation and recreation	Castle Creek, Seneca Lakefront, Bicentennial Park, parking lot on south of Castle Street described in Proposal 13.
community resources	To make visible the community support network that exists for Genevans	Geneva residents	Port 100, City Hall, Center for Disability Rights, Trinity Place Community Center
dining	To illustrate the variety of food options available in Geneva based on type of food, cost, and time of operation.	Everyone	GF Restaurant, Red Dove Tavern, La Reyna del Mexico, Pinky's, Man Yuan, Simply Sweets, Char Burrito Bar, The Market
daily amenities	To make residents aware of the variety of offerings within their own city for accomplishing everyday tasks, and to show that wayfinding is not simply catered towards outside visitors.	Geneva residents doing everyday errands and shopping	Rite Aid, Lyons Community Bank, Symmetry Barber Shop, Century 21 Real Estate, Post Office
mural	To call attention to the street art that helps give Geneva an artistic character; this trail could also be coupled with a public art wayfinding trail.	Tourists and local art lovers	Seneca Steamboat mural on the northern side of East Castle, Under the Lake Mural adjacent to the parking lot mentioned in Proposal 13, LOVE mural on Linden Street
architectural	To promote the distinct architectural heritage of Geneva and educate people on how the built environment illustrates the history of the community	Tourists and Genevans interested in history or design	YMCA building, City Hall, Post Office, Lyons National Bank, Verizon Building

section vi. conclusions and key takeaways

In sum, this report utilizes an investigation into Geneva's history and an analysis of the city's current reality to create a series of suggestions for the future of Castle Street.

The following are specific takeaways from each section of the report, illustrating ways in which all five sections can ultimately connect to encourage the residents of Geneva to creatively reimagine the use of Castle Street in the downtown district.

Each District of Castle Street has a specific story worth telling about Geneva's history; wayfinding, signage, and urban green spaces can bring these agricultural, industrial, and cultural histories to life for residents and tourists.

Nine professional studies completed between 2008 and 2017 demonstrate that the City of Geneva needs to develop a community identity through recognizing its heritage, increase the amount of welcoming community spaces in its downtown, and improve the accessibility of these spaces for users of all forms of transportation.

The bottom-up design process utilized in this report illustrates that Genevans are extremely invested in the revitalization of the downtown district, and resulted in a creative, albeit idealistic, set of proposals for reimagining Castle Street.

The creation of six "Functional Zones" ensures that the streetscape caters to all types of users, improving accessibility for pedestrians and bicyclists without sacrificing parking necessary for economic viability of businesses, and creating public spaces and green spaces that foster pleasant environments to promote community interaction amongst all types of Geneva residents.

Effective wayfinding signage can complement physical proposals by improving accessibility and navigation for pedestrians, bicyclists, and automobile traffic, by calling attention to community spaces and amenities, and by honoring the heritage of the City of Geneva, NY.

section vii. references

- Badger, E. (2012 January 31). The Surprisingly Complex Art of Urban Wayfinding. Retrieved from <https://www.citylab.com/design/2012/01/surprisingly-complex-art-wayfinding/1088/>
- Bardon & Loguidice, DPC. (2017). Geneva Active Transportation Plan. Retrieved from http://cityofgenevany.com/wp-content/uploads/2016/10/DRAFT_Geneva-Active-Transportation-Plan.pdf
- Bergmann Associates. (2012). City of Geneva Downtown Revitalization Initiative. Retrieved from http://cityofgenevany.com/wp-content/uploads/2016/10/GenevaLPC_Meeting-1_10-4-16.pdf
- Bristol City Council. (2003). Bristol Legible City. Retrieved from <https://www.bristollegiblecity.info/index.html>
- Brumberg, D. G. (1976). The Making of an Upstate Community: Geneva New York 1750-1920. Geneva Bicentennial Commission: Geneva.
- Byrne, D. (2008). Bike Racks. Retrieved from <http://davidbyrne.com/explore/bike-racks/about>
- Cally Labour Councillors. (2010 December 14). Copenhagen Street zebra crossing to be restored to safe condition. Retrieved from <https://callylabourcouncillors.org.uk/2010/12/14/copenhagen-street-zebra-crossing-to-be-restored-to-safe-condition/>
- Cayuga-Seneca Canal Trail Association. (2003). Cayuga-Seneca Canal Trail. Retrieved from: <http://cay-sentrail.org/>
- Christmas, S., et. al. (2010 September). Cycling, Safety and Sharing the Road: Qualitative Research with Cyclists and Other Road Users. Retrieved from https://www.researchgate.net/profile/Shawn_Helman/publication/268288502_Cycling_Safety_and_Sharing_the_Road_Qualitative_Research_with_Cyclists_and_Other_Road_Users/links/54bf7c340cf2f6bf4e04f16d.pdf
- City of Geneva. (2016). Lakefront Access Improvement Project. Retrieved <http://cityofgenevany.com/lakefront-access-improvement-project>
- City of Geneva. (1895, 1898). City of Geneva Directory. Geneva Historical Society.
- City of Geneva Public Art Committee. (2017 April 5). RFP: Lakefront Park Public Art Shade Structures in Geneva, NY. Retrieved from http://cityofgenevany.com/wp-content/uploads/2016/05/RFP_Shade_Structure_Sculpture_01_23_17
- City of Geneva Transportation Department. (1913). Geneva Public Works Record. Geneva Historical Society.
- City of Ithaca, NY. (2018). Commons. Retrieved from <http://www.cityofithaca.org/174/Commons>
- City of Los Angeles, People Street. (2018). Current Parklet Projects. Retrieved from <http://peoplest.lacity.org/parklet/>

Cleveland, W. (2016). Geneva Awarded \$10M for downtown revitalization. Retrieved from <http://www.democratandchronicle.com/story/news/2016/07/06/geneva-awarded-10m-downtown-revitalization/86786968/>

Congdon, C. H. (ed). (1905). Geneva, New York: The Lakeside City. Geneva Chamber of Commerce: Geneva.

Cowen, T. (2010). Free Parking Comes at a Price. Retrieved from <http://www.nytimes.com/2010/08/15/business/economy/15view.html>

czbLLC. (2008). The Neighborhoods of Geneva, NY A Report on Strategic Investments in Community Health and Strong Markets. Retrieved from <http://cityofgenevany.com/wp-content/uploads/Current/City%20Departments/neighborhood/Neighborhood%20Study.pdf>

czbLLC, et. al. (2016). City of Geneva's Comprehensive Plan and Community Decision-Making Guide: Part One. Retrieved from <http://cityofgenevany.com/wp-content/uploads/2016/09/Geneva-Comp-Plan-Final.pdf>

Emmons, E. T. (1931). The Story of Geneva. Geneva Daily Times: Geneva.

Federal Highway Administration. (2013 February 1). Safety Benefits of Raised Medians and Pedestrian Refuge Areas. Retrieved from https://safety.fhwa.dot.gov/ped_bike/tools_solve/medians_brochure/.

Finger Lakes Beer Trail. (n.d.). Upcoming Events. Retrieved from <https://fingerlakesbeertrail.com/content/>

Finger Lakes Wine Country. (2018). Seneca Lake Wine Trail. Retrieved from <http://www.fingerlakeswinecountry.com/wine-food/wine-trails/seneca-lake-wine-trail/>

Genesee-Finger Lakes Regional Walkability Improvement Program. (2015). Geneva Walkability Action Plan. Retrieved from http://cityofgenevany.com/wp-content/uploads/2016/10/Geneva-Walkability-Audit_Final.pdf

Genesee Transportation Council. (2016). Long Range Transportation Plan. Retrieved from http://www.gtcmppo.org/sites/default/files/pdf/2016/lrtp_2040.pdf

Geneva Historical Society (2003). Images of America: Geneva. Arcadia: Charleston.

Geneva Historical Society (2007). Images of America: Geneva 1940-1970. Arcadia: Charleston.

Greater Meredith Program. (2018). Do The Loop: A self-guided tour of the town and its businesses. Retrieved from <http://www.greatermeredithprogram.com/do-the-loop.html>

Grover, K. (1994). Make a Way Somehow: African-American Life in A Northern Community 1790-1965. Syracuse University: Syracuse.

Harford, L. M. (1976). The Country Cousin: A Chronicle of the Town of Geneva. Vanderbrook: New York.

Hayes-Conroy, J. et. al. (2016) Part 3: Geneva Comprehensive Plan Dialogue and Survey Input. Retrieved from <http://cityofgenevany.com/wp-content/uploads/2016/09/Part-3-Final.pdf>

Herbes, B. (n.d.). Wayfinding for Pedestrians in Urban Areas. Retrieved from http://www.swdc.wa.gov.au/media/100057/pedwayfinding_bruce%20herbes.pdf

Hockenos, P. (2013 April 6). Where 'Share the Road' Is Taken Literally. Retrieved from <https://www.nytimes.com/2013/04/28/automobiles/where-share-the-road-is-taken-literally.html>

Indianapolis Cultural Trail. (2018). Cultural Trail. Retrieved from <http://indyculturaltrail.org/>

Ingalls Planning and Design, et. al. (2010). City of Geneva Lakefront/Downtown Connectivity Study. Retrieved from http://www.gtcmppo.org/sites/default/files/pdf/2010/GenevaConnectivityStudy_ExecSum_09222010.pdf

Joel Katz Design Associates. (2013). Walk! and Ride! Philadelphia. Retrieved from <http://www.joelkatzdesign.com/3walk!.html>

Kodransky, M. (2014). Shared Parking. Retrieved from https://www.itdp.org/wp-content/uploads/2014/12/Shared-Parking_ITDP.pdf

Landscape Online. (n.d.). Mercer Street East, Seattle. Retrieved from <http://www.landscapeonline.com/research/article-a.php?number=27504>

Levinson, D. (2018 February 14). The Ambiguous Hump. Retrieved from <https://transportist.org/2018/02/14/the-ambiguous-hump/>

Litman, T. (2016). Parking Management. Retrieved from http://www.vtpi.org/park_man.pdf

McCarthy, N. (2016 May 27). Meet Geneva's Biggest Fan. Retrieved from <https://www.democratandchronicle.com/story/rochester-magazine/finger-lakes/2016/05/27/geneva-city-manager-matt-horn/84854202/>

Mellow Johnny's Bike Shop. (2018). People For Bikes. Retrieved from <https://austin.mellowjohnnys.com/the-latest/help-trek-change-the-world>

Monroe, J. H. (1912). A Century and a Quarter of History: Geneva. W.F. Humphrey: Geneva.

National Association of City Transport Officials. (2018). Urban Street Design District: Lane Width. Retrieved from <https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/>

Nelson-Nygaard (2015). Maximizing Urban-Core Parking with Private-Public and Private-Private Parking Agreements. Retrieved from https://www.usdn.org/uploads/cms/documents/2015usdnconvening_summary.pdf

New York Heritage Digital Collections. (2017). Geneva Historical Society. Retrieved from: <http://cdm16694.contentdm.oclc.org/cdm/landingpage/collection/p15109coll6>

New York State Department of Transportation. (n.d.) New York State Bicycle Route 14 Description. Retrieved from https://www.dot.ny.gov/display/programs/bicycle/maps/app_repository/New%20York%20State%20Bicycle%20Route%2014%20Route%20Description.pdf

Parsons & Brinckerhoff, & TWLA. (2012). City of Geneva Waterfront Infrastructure Feasibility Study. Retrieved from http://cityofgenevany.com/wp-content/uploads/Geneva-Waterfront-Infrastructure-Feasibility-Study_2012.06.25_FINAL_small.pdf

Peter J. Smith Associates. (2014 July). Tompkins County Wayfinding & Interpretive Signage Plan. Retrieved from https://www.tompkinschamber.org/wp-content/uploads/2014/07/TompkinsWayfinding_Ph1and2-final_sm-file-size.pdf

PlaceLabs. 2018. Linden Alley. Retrieved from <http://placelabsf.org/linden-alley/>

Port 100. (2018). Frequently Asked Questions. Retrieved from <http://port100cowork.com/faq/>

Project Evergreen. (n.d.). Environmental Benefits of Green Space. Retrieved from <http://projectevergreen.org/resources/environmental-benefits-of-green-space/>

Radzевич, N. (2017 January 28). Bethlehem paving a new paradise out of a parking spot. Retrieved from <http://www.mcall.com/news/local/bethlehem/mc-bethlehem-alfresco-dining-parklets-20170128-story.html>

Regional Transit Service. (2017 July 31). Geneva Route 261. Retrieved from https://www.myrts.com/Portals/0/Schedules/Regionals/Ontario/RTSOntario_Route-261-7-31-17.pdf

Regional Transit Service. (2017 July 31). Geneva Route 255. Retrieved from: https://www.myrts.com/Portals/0/Schedules/Regionals/Ontario/RTSOntario_Route-255-7-31-17.pdf

Sanborn Map, Geneva N.Y. (1884). ProQuest. Retrieved from <http://sanborn.umi.com/ny/5942/dateid-000001.htm?CCSI=24402n>

Shaw, D. (2010 October 13). Study Suggests Walking Bridge, Median. Retrieved from http://www.ftimes.com/news/study-suggests-walking-bridge-median/article_bd336e33-c9e5-51af-b782-6600855689cc.html

Sign Research Foundation. (2013). Urban Wayfinding Planning and Implementation Manual. Retrieved from <http://www.signresearch.org/wp-content/uploads/Urban-Wayfinding-Planning-and-Implementation-Manual.pdf>

Smith, W. H. (1931). *An Elegant But Salubrious Village: A Portrait of Geneva, New York*. W.F. Humphrey: Geneva.

Society for Experiential Graphic Design. (2014). What is Wayfinding? Retrieved from <https://segd.org/what-wayfinding>

Trinity Church Geneva (2018). Our Vision. Retrieved from <http://trinitygenevany.org/>

University of Delaware (2018). What is Streetscaping? Retrieved from <http://www.completecommunitiesde.org/planning/complete-streets/streetscaping/>

Visit Finger Lakes. (n.d.) Geneva Skyline Trail. Retrieved from: <http://www.fingerlakes.org/sites/default/files/pdf/51.pdf>

Wickenden, A. (2017 June 30). HWS Entrepreneurial Studies Launches Downtown Presence. Retrieved from <http://www2.hws.edu/hws-entrepreneurial-studies-moves-downtown/>