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BRIGHAM CITY, UTAH:
MAIN STREET DISTRICT IMPROVEMENTS

by

Ross Swanson

A report submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF LANDSCAPE ARCHITECTURE

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1999

ABSTRACT

This report is the documentation for a design strategy of Brigham City, Utah's Main Street Historic District (MSD). The purpose of the project is to develop a strategy that can be used to guide future physical improvement to the MSD. The strategy developed in this report provides specific goals to reinforce MSD's district identity, and enhance the pedestrian and public parking networks inside the MSD. Successful implementation of these goals will assure that the MSD will maintain a commercial and social importance for the city.

This report gives a brief overview of the events that have led to the demise and now renewed interest for the western American main street. The methodology used to develop this design strategy for Brigham City, includes a historical overview of Brigham City, followed by an analysis of existing conditions and opportunities for the MSD. The information in these initial chapters helps to develop the design goals. This report proposes that any future development and enhancements respect the historic form and character that is present in the MSD. This report proposes a series of design guidelines to help preserve and enhance this unique historic character. Additional proposals are made to which enhance the pedestrian and public parking networks for the district. These networks balance the needs of both the pedestrian and the automobile inside the MSD.

ACKNOWLEDGEMENTS

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I owe a special thanks to the project chair Mike Timmons, for the hours of editing, and comments that helped focus this project. Additionally I would like to thank the rest of the committee for their comments and input. All of these comments were appreciated and valuable to my education during this project.

Thanks to the entire faculty at Utah State University's Department of Landscape Architecture. I feel very fortunate to have been able to go through such an overall excellent curriculum. Ardith Poulson, thank you for every answer and favor that you were able to provide me, despite your rigorous responsibilities.

To all of my close friends that I went through the department with, I wish you all good luck with your endeavors. Thank you for creating such fond memories of my graduate school years. My future nostalgia for Logan and USU will be because of your being there.

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CHAPTER I

INTRODUCTION

Background

Western American main streets have been the subject of numerous studies attempting to capture and preserve the essential vitality of small town America. Undertaken in the spring of 1998, at the invitation of the Planning Department of Brigham City, Utah, this project addresses the recurring theme of how landscape architects design main streets and associated business districts that are vital to citizens.

The project described in this report addresses the *main street problem* as applied to a single western American community, through a landscape design for Brigham City's Main Street District, or MSD. Because of the design orientation of this study, much of the report consists of documentation supporting the design strategy. But because good design work does not occur in a vacuum, the report begins with a contextual overview of the main street problem.

The ensuing chapters address the specific problems and considerations posed by the Brigham City MSD design challenge. A fundamental initial consideration was the National Main Street Center's design strategy, which is "to enhance the physical appearance of the commercial district by rehabilitating historic buildings, encouraging supportive new construction, developing sensitive design management systems and long-term planning" (National Main Street Center, 1998). Interpreting this strategy, the project sought to expand on the positive design elements of the district in order to create a viable, visually identifiable, functional and unique MSD for the Brigham City community.

Program Chapters

The “flow” of the report is from a general discussion of the main street problem to design recommendations specific to the Brigham City project. Chapter I provides a summary of main street development in the American West. This summary establishes the premise that the morphology of the western main street has led to a lesser pedestrian friendly atmosphere that impedes the vitality of established urban commercial streets.

Subsequent chapters are concerned with Brigham City directly, detailing the process of researching the Main Street District in order to make design recommendations in its behalf. Chapter II is a review of Brigham City history, the history of the MSD, and the MSD’s “built” inventory. This chapter highlights the unique elements and opportunities that exist inside the MSD.

Chapter III focuses on opportunities and constraints that the MSD presents in its current form. Potential design opportunities exist inside the MSD in the form of existing auto and pedestrian connections. Outside the MSD, contextual influences such as regional public-work projects that loosely surround the MSD may figure prominently in its future.

Design suggestions, which take the form of conceptual plans, guideline drawings, and simulations, comprise Chapter IV. The report concludes in Chapter V, offering suggestions for areas of further study and planning projects.

Main Street America: A Changing Landscape

The purpose of the American main street and what people feel about it has changed markedly with the proliferation of the automobile and the street and highway system used to support it. Writing in “Two Street Scenes” in 1954, J. B. Jackson compared and contrasted two small main streets in the U.S. (Jackson, 1970, p.170). The first street was optimized for the most efficient automotive traffic patterns, with little regard for pedestrians and non-auto uses. It was six lanes wide, with minimum sidewalk widths. Numerous elements, such as benches, trees, and parking had been removed from

the streetscape in order to facilitate smoother auto traffic flow. The street maintained a crowded feel for a few business hours of the day, but at other times there seemed to be little socializing or gathering of pedestrians. At night the street was devoid of any pedestrian activity.

Jackson's second street maintained a scale and speed that recognized and encouraged pedestrians and business activity. This street remained narrow and congested, with both automotive and pedestrian traffic all day and into the evening, when the street became a social center for the town. Jackson asserted that the pedestrian friendly street was the more successful of the two street models, allowing multiple uses for townspeople.

More than 40 years have passed since Jackson wrote this article. In the interim Jackson's less desirable main street -- the one optimized for efficient auto flow--has become the dominant prototype in the American landscape. Located at the periphery of town, at interstate freeway junctions and in strip-developments, the new main street may not look like a traditional street at all. Business is set back from its edge by large asphalt parking lots. Traffic is encouraged to move through its corridors at fast, smooth rates of speed. Pedestrian safety and comfort is lost, making outdoor public gatherings impossible.

When Jackson described his two main street models their value was not just scholarly. His descriptions called attention to how much America's main street had changed by the 1950's. More to the point, they made us keenly aware how much the suburban strip development had begun to supplant the traditional main streets with a less holistic streetscape model. But Jackson's models did not explain why the inferior model-strip developments - had begun to dominate the new American townscapes. By looking at regional development during the 20th century, we can begin to understand the reasons.

Main Street in the West's Early Settlements

The original main streets in the American West consisted of one main path through town where businesses located to take advantage of passing traffic. This clustering of commerce offered a stronger regional draw to farmers looking for supplies. As the importance of these centers grew, taverns, hotels, churches and town halls were added, creating a social function for the main streets (Wetherell and Kmet, 1995, p. 153).

As the west continued to grow, towns became identified with their main street. Prosperous main streets were those that best responded to the pragmatic needs of commerce and transportation. During the frontier period, the primary model of transportation was horse and carriage. Westerners who could reach more than one town by this means had nearby towns competing for their business.

The Railroad Arrives. Rail lines expanded westward through the mid 19th century and with their advance, town placement and main street location began to shift. If a town was not a rail stop, it often lost regional commercial status. Towns that had been chosen as rail stops sought to exploit their advantage by locating their main street commercial centers near the rail infrastructure. Tight in-fill of commercial buildings along these streets developed thereafter.

With the presence of rail lines came urban speculation and a desire for town permanence. Small western towns wanted to be large western towns, and have all the sophistication and financial importance of their eastern predecessors. In their desire to grow, main streets became a symbol of prominence, serving as a catalyst for structural improvements. These improvements came in a variety of forms, including more permanent materials for street and pedestrian paths, electric lighting, trees, and designated parks or plazas (Wetherell and Kmet 1995, p.218).

The Automobile's Early Influence. The automobile may be the one single influence that most significantly changed the landscape and townscape of Western America. By the 1920's the automobile had gained a significant place in American lifestyle. It provided a transportation alternative for regional citizens. Towns that did not have the advantage of the railroad could once again compete for surrounding farmers' business. Many sought to do so by improving the look and functionality of their main streets. Wooden plank sidewalks gave way to concrete by the interwar years. Street paving "progressed" from compacted soil, to gravel, to pavers, and finally asphalt (1995, p. 201).

But the automobile's popularity also introduced a whole new set of main street problems. No longer was the main street infrastructure and spatial layout suitable for the convenience that automobile drivers wanted. Speeding, traffic congestion, and pedestrian safety became new issues. Planning departments began to discuss how much parking the automobile required and where it was to be allowed.

By the 1930's the automobile had begun to take on an additional role. Cars were not only a form of transportation, but also a status item. People who brought their cars to Main Street wanted to be seen in them. Farmers enjoyed socializing from their cars when they came to town on Saturdays. Women and children, who often were not allowed in social clubs, gathered around their automobiles during the day and evening.

This status dimension created new planning problems. The public wanted to drive to the most socially prominent places. Early attempts to relegate parking to side streets and public lots, which limited social visibility, met with protest as early as the 1930's (1995, p. 205).

Depression and War Years. The depression and World War II slowed development of most main streets. However, when there was development, its predominant styles were "Art Deco" or "Art Moderne." Both styles reflected streamlined forms of transportation in their designs (Francaviglia 1996, p. 51). Main street architecture and design details started to have a curvilinear and horizontal emphasis. Planning and design not only

reflected an emphasis on the idea of speed but also encouraged it. Storefronts and streets became longer and wider, to facilitate views from the now faster moving automobiles. They spawned main street development that sprawled outward, creating a new phenomenon known as the strip. (Francaviglia 1996, p.53).

The Strip Main Street Begins to Prevail. The “strip” main street took off in the years following WWII. With the help of a strong economy and cheap land, people moved out from the civic core, and commercial development followed. Accommodating the automobile was cheaper and easier at the fringe of town. The abundance of land made new construction a reasonable alternative to retrofitting the older commercial district. In addition these new commercial districts were closer to the suburbs where people were moving. More and more, city planners found it difficult to deal with the sheer number of cars that entered older downtown communities. Traditional main streets could not accommodate the increased traffic.

Federal Initiatives. Federal initiatives during the postwar years encouraged strip main street development. The Federal Highway Act of 1956, which dedicated massive amounts of money to extensive highway rehabilitation and the construction of a national highway system, changed the location and feel of commercial districts for small towns. The Act contained a set of road geometry standards that were later codified in “The Green Book” of the American Association of State Highway and Transportation Officials (AASHTO). Until 1991, any road construction that was paid for with Federal money was required to meet these standards. They specified spatial designs for streets wider and longer than previous norms. In emphasizing the automobile, they paid little regard to pedestrians or other transportation forms (Ehrenhalt 1997, p. 2). However well intentioned the Act may have been, its codes encouraged strip development while leaving many traditional main street districts in economic blight.

1970'S and 80'S. Western urban planners came under additional pressure in the 1970's and 80's, responding not only to high internal population growth but in-migration from other parts of the country. As the West continued to grow at a relentless rate, suburbs expanded further and further from established commercial centers. During the Reagan administration, individual worker wage deflation encouraged the emergence of the two-worker family. With household partners heading to work in different directions, the two-car family became not just a status symbol but an economic necessity.

The Winds of Potential Change. In the last 20 to 30 years, renewed interest in the older style of Main-streets as a desirable community element has emerged. This interest has manifested itself in design theory, organizations, and flexibility in design codes.

Design Theory. As the century comes to the end, many new town designers have started to embrace the spatial and design attributes of the historic Main Streets. The Neo-Traditional or New Urbanism movements that are gaining popularity with designers are based on older styles of design. Architect Peter Calthorpe describes a desirable commercial core as follows:

The configuration of shops in the core area must balance pedestrian and auto comfort, visibility, and accessibility. While anchor stores may need to orient to an arterial and parking lots, smaller shops should orient to pedestrian "Main Streets" and plazas (Calthorpe 1993, p.78).

The Calthorpe model is very similar to the description admired by J. B. Jackson fifty years earlier. Dismissed by some as simply waves of nostalgia, marketing studies and preference surveys in some parts of the country reveal an attraction by many Americans to the older main-street form. Several towns burdened with traffic and expensive infrastructure have begun to explore these "new" movements and look back to these earlier design forms for answers. Perhaps this is part of the process of good design that

Christopher Alexander was referring to when he wrote:

It is a process, which brings order out of nothing but ourselves; it cannot be attained, but it will happen of its own accord, if we will only let it. (Alexander 1979, p. ix)

Organization. The National Main Street Center, sponsored by the National Trust for Historic Preservation, was founded in 1977 to help towns revitalize their historic commercial districts. The organization feels that historic commercial districts are important to the “heritage, economic health and civic pride of the entire community”. This program approaches each revitalization using four points of concentration: design, organization, promotion, and economic restructuring (National Main Street Center 1998). The four-point approach assures a holistic revitalization.

Flexibility in Design Codes and Federal Funding. Two pieces of recent legislation have set the stage for a change in the Main Street development pattern. The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA), and the 1995 National Highway System Designation Act of 1995, both contain design-related provisions that provide flexibility in road design and funding regulations. Both laws allow local communities to choose appropriate criteria for building (or rebuilding) of roads and highways. These criteria can now include the preservation of historic and scenic values, in contrast to the previous practice that forced federally funded projects to follow AASHTO standards of “*The Green Book*”. With this new flexibility, towns may now receive funding for streetscapes that fit the surrounding context, and encourage multiple forms of transportation.

In order to address issues additional to driver safety, the Federal Highway Administration with the help of American Association of State Highway and Transportation Officials and other interest groups, has published a book titled “Flexibility

in Highway Design”. This publication is to be used in conjunction with “The Green Book” to provide standards for balancing safety and the several other interests of communities (U.S. Dept. Trans. FHA 1997, p. 3).

CHAPTER II

BRIGHAM CITY: A MAIN STREET CASE STUDY

A Western City's Evolving Main Street

Brigham City, Utah, is a town that is experiencing the growth problems described in chapter I and is taking action to minimize further loss of importance to its historic main street. The town has implemented a strategy of strong planning and program organization that will be discussed further in this paper. A key ingredient in this strategy has been the designation of a Main Street District (MSD) as a viable center for the town.

The MSD, as identified by the community's planning department, runs between 200 South and 100 North along Main Street, including the blocks between 100 East and 100 West Avenues. In total the MSD occupies six square blocks (Figure 1).

In addition to capital and physical investment in the district, the community has organized a nonprofit group of merchants to promote a revitalization program. It is called Mainstreet Brigham City and it is tied to both national (National Main Street Center) and state (Utah Pioneer Communities) programs that concentrate on historic commercial district revitalization. It has assisted some merchants by providing or identifying matching funds for storefront restoration. The program also promotes downtown revitalization through events like Peach Days and the Golden Spike Concert Series (Sakal 1998).

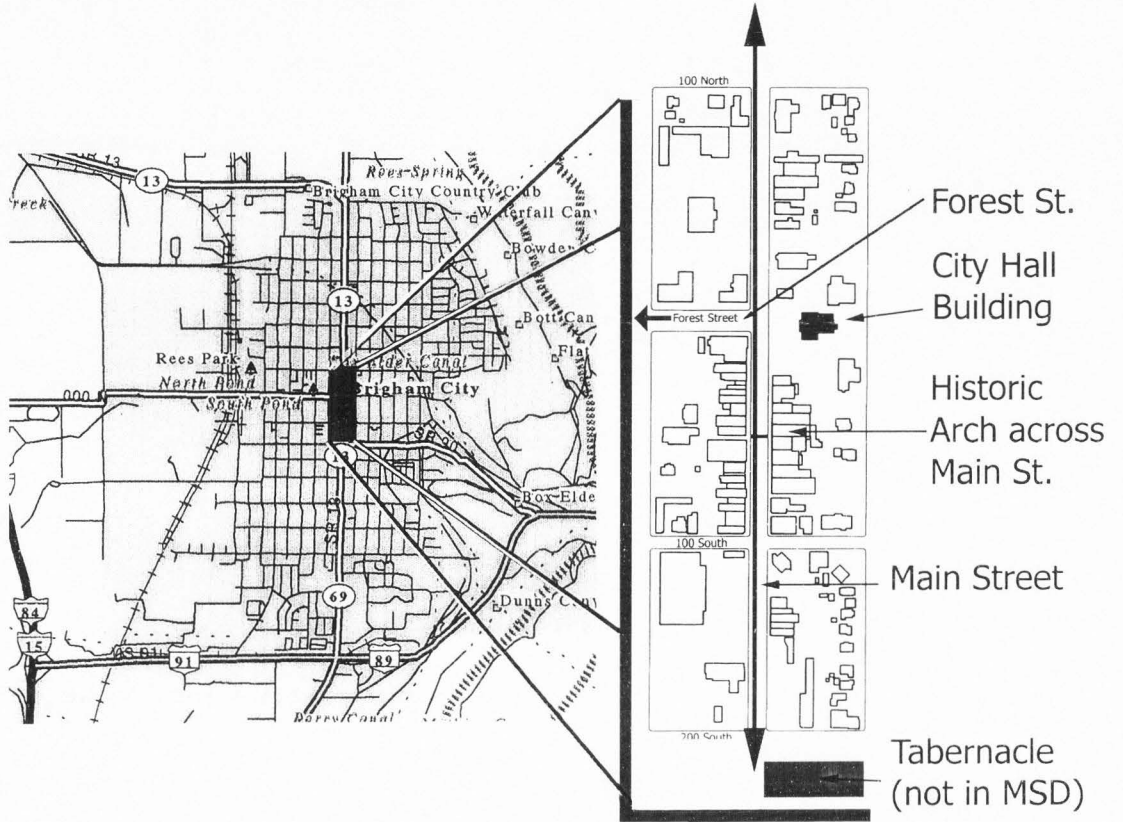


Figure 1. Map of Brigham City's Main Street District (MSD).

Brigham City's Urban Core: A Brief History

The first white settlers in the area which was to become Brigham City, arrived in the early 1850's, with the intention of establishing a self-sufficient cooperative community. Mormon church president Brigham Young sent apostle Lorenzo Snow and 50 families to the area, and in 1855 the town was platted and named after the church leader (Bradford 1998, p. 1)

The layout of the town followed the general grid pattern of Mormon town settlements. Streets bearing north and south were designed at 6 rods or 99 feet in width. The length of these blocks average 660 feet. Streets bearing east and west were laid out at 4 rods or 66 feet wide, and 330 feet in block length. There were two exceptions to this east-west pattern; Forest Street with a width of 132 feet and 200 South at 98 feet (Brigham City Comprehensive Plan, 1988, p.7). Given the great width of Forest Street, it can be inferred that the street was intended to be a significant street in the settlement (Douglas 1998).

Three public squares were originally laid out in the community. These were Prospect Square, Sage Brush Square, and Public Square. Public Square later was named after Brigham Young and is an important park for the community. None of these squares front on Main Street, however they are in close proximity to the district and still serve as important gathering areas (Douglas 1998).

By the end of the 1850's, several small businesses and homes had been established on Main Street, and the county courthouse had been located at the eastern terminus of Forest Street. The courthouse initially served city and county business, theatrical productions, and religious meetings (Bradford 1998).

In 1884 the Brigham City Mercantile and Manufacturing store was built at the corner of Forest and Main Street. It remained the property of the local food co-op until the co-op closed in 1895. The three-story building has subsequently been home to several

businesses and currently houses the First Security Bank of Utah (Bradford 1998, p. 24).

Early Main Street had streams of water flowing down either side of the street, which irrigated the shade trees planted alongside, between the ungraded street and sidewalks. Sidewalks and roads were graded, oiled, and eventually paved as needed (Forsgren 1937, p. 268).

One of the principal industries for the early settlers was fruit orchards, specifically peaches. Many of the residents grew fruit trees on their own property as a way of earning extra income. Fruit production would remain the primary industry for the community through the 1920's and 30's. In 1904 the town started an annual Peach Days celebration, which included Main Street festivities. Peach Days is still celebrated in present times.

By 1910, business on Main Street included cafes, saloons, hotels, and the Box Elder Academy of Music and Dancing. The Academy was a popular dance hall for the region in the early part of the century. It initially housed a ground floor open-air pavilion and a second-floor dance hall (Bradford 1998, p. 24). Built in 1903, the Academy still stands. County officials have proposed to have it remodeled soon.

The city continued to invest in its civic core by adding a city hall, a fire station, a Carnegie Library, county offices, and very recently a federal courthouse. Originally built in 1909 the city hall and fire stations were placed adjacent to the courthouse at the corner of Forest and Main Streets. It is clear from their proximity that they were intended to form the city's civic core.

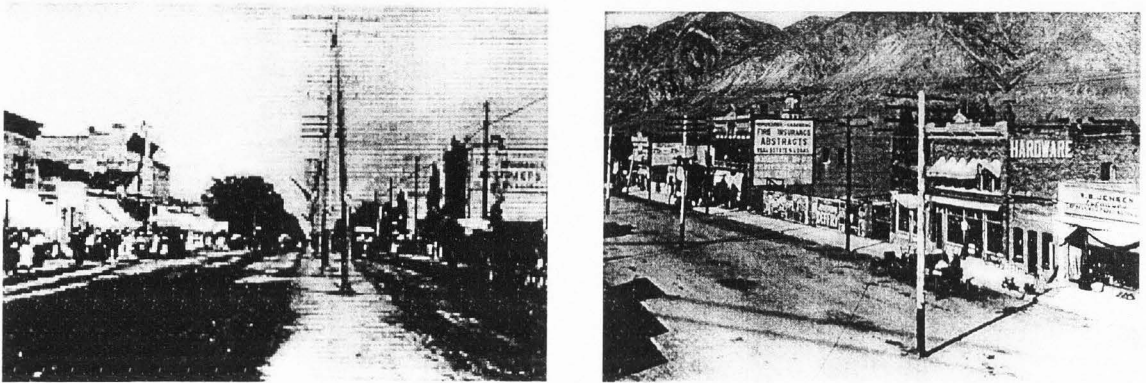
In 1928 President Coolidge authorized the construction of the Bear River Bird Refuge, just west of Brigham City. As a promotional attraction for the town and refuge, the chamber of commerce proposed the building of a welcome arch, which still stands. The construction of the arch took three days and cost \$2,400, twice the estimated amount. Despite the cost, there was widespread support for the 10,000 pound arch and its 350 electric lights (Bradford 1998).

In 1942 the Bushnell General Hospital, built at the south end of town, was constructed to treat soldiers from the war. The influx of medical and support staff increased business to the area and Main Street started to grow. The hospital remained until 1946 and was then converted to the Intermountain Indian School, which operated from 1950 to 1984. High-density residential units are now planned for the old hospital site. Since the school's closing, growth for the city has come from the construction of the Thiokol Chemical Corporation.

In recent decades the Main Street Central Business District has felt the pressure of commercial growth from other areas. Its vitality and importance as a service provider has diminished. Reliance on the automobile and commercial spread development were cited as primary causes of declining vitality of the Central Business District in Brigham City's Master Plan of 1988. The plan states, "The return of emphasis in the central area [Central Business District] should be a major project of the city in the years ahead" (Brigham City Comprehensive Plan 1988). In the last decade the city has pursued this goal by starting the Main Street program and investing in streetscape renovations and updates.

Photographic Historical Inventory of Main Street

The following photos are included to show the changes that have occurred to the Main Street corridor. Photos have been provided by the Compton Photo Collection at the Brigham City Museum.



Provided by the Compton Collection, Brigham City Museum

Figure 2. Photos of Main Street, turn-of-century.

The architectural layout of the street is starting to develop by this time. Close setbacks, wide sidewalks and roads are evident. Trees are not a consistent element of the streetscape but awnings are; they extend the building facades across the sidewalk. Street material is unpaved but sidewalks are separated from the street by grade and finished in a different material. These differences create a clearly designated pedestrian space. Electric lines are centralized down the street.



Figure 3. Photo of Main Street, circa 1930.

Provided by the Compton Collection, Brigham City Museum.

The automobile has taken a strong hold on the streetscape of Brigham City. Angled parking appears on both sides of Main Street, with two lanes of traffic. The welcome Arch has recently been erected, but not its mid-block pedestrian crossing. Advertising signage, including painted advertisements on brick walls, dominates the visual landscape as businesses compete for attention. Amenities such as awnings are not as visually dominant as the signage. Permanent light fixtures and hard surface street and gutters have been installed. The photo may have been taken on the Fourth of July - note the flags.



Provided by the Compton Collection, Brigham City Museum.

Figure 4. Photo of Main Street, late 1940's.

Angled parking has given way to parallel parking on both sides of Main Street, allowing four lanes of traffic. A mid-block pedestrian crossing with safety sign in the center of the road now appears under the arch. The architectural character has changed very little since the 20's. Awnings and signage continue to dominate the streetscape. Sign styles have "progressed" from painted buildings to 3-D projection lettering and graphics. Banners along the street celebrate "Peach Days," a Brigham City tradition.



Provided by the Compton Collection, Brigham City Museum.

Figure 5. Photo of Main Street, circa 1960.

Four traffic lanes are permanently striped, with a small, insignificant median strip. Parallel parking persists, as does the mid-block crossing. The influence of modernism is apparent in less ornate facades whose cheaper materials have replaced brick. Cobra head streetlights have replaced light posts. There are still no street-trees planted along this section of Main Street.



Figure 6. Photo of Main Street, circa 1990.

The streetscape shows signs of a new design treatment. Pedestrian friendly amenities such as trees, and colored pavers have been added. Note that the obtrusive “cobra head” street lights of the 1960’s have been replaced by smaller scale “historic style” lamp posts. Awnings have almost entirely been removed from buildings. The architectural facades maintain styles from the 1960’s but some restoration has started to occur on historically important buildings. The traffic corridor is still four lanes wide, with parallel parking on the sides. The mid-block crossing below the arch is still poorly defined, however flashing warning lights have been added to warn drivers of its presence.

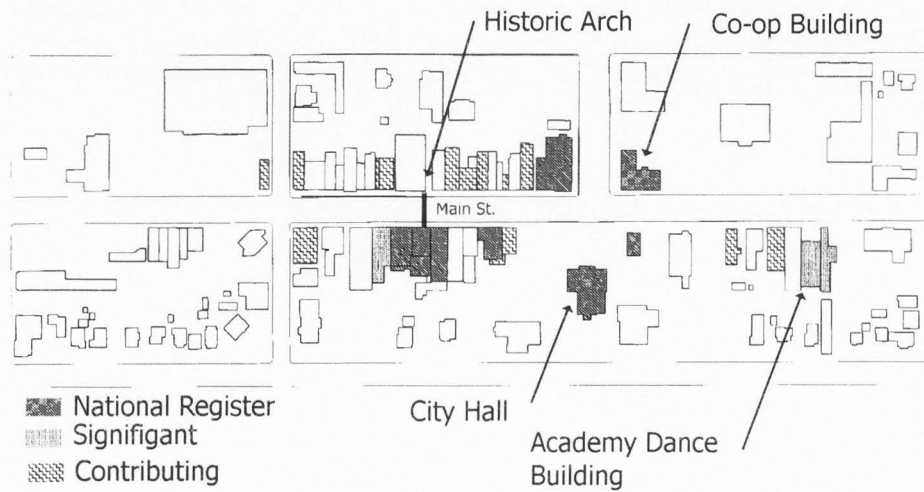


Figure 7. Historical architectural inventory.

An Inventory of Historic Elements

Given the lack of new development in Brigham City's downtown during the last few decades, the city has maintained a strong group of historic structures within the district. Figure 7 is a map which shows a compilation of architectural surveys for the MSD undertaken by Larry Douglas and Kathleen Bradford, of the Brigham City Museum, for the purpose of nomination to the National Register. The mapped designations comply with categories established by the National Historic Register and the Utah State Preservation Office.

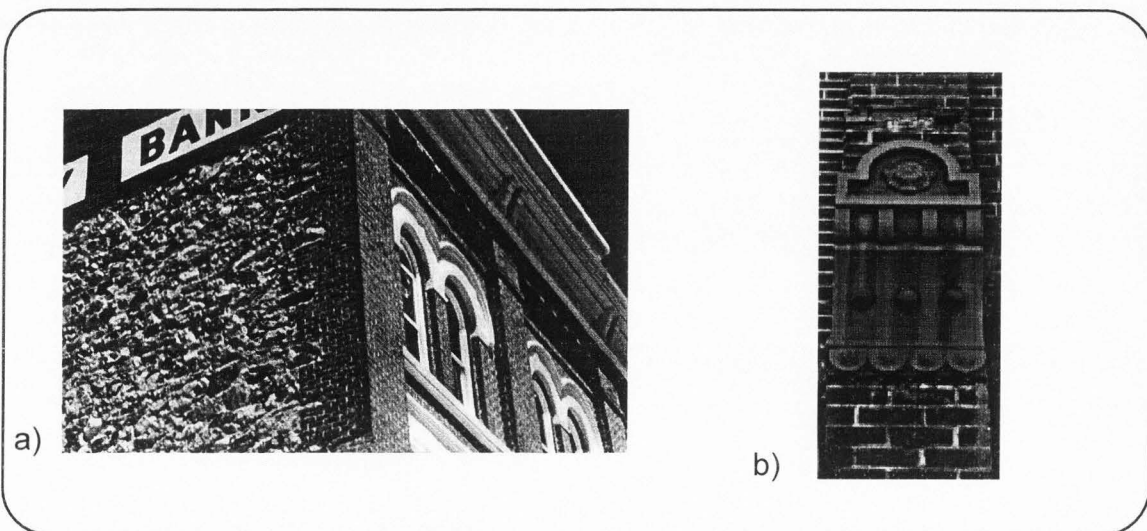
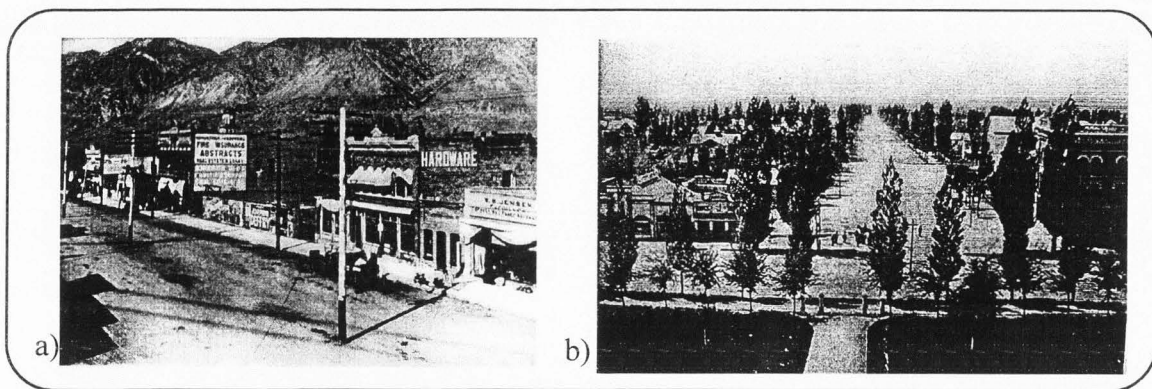


Figure 8. Historic building materials used in Brigham City.

Historic Building Materials. Traditional building materials in the district include mostly brick and quarried stones from the region. Figure 8a shows the native stone as well as brick that was used on the historic co-op building, now the First Security Bank. Architectural detailing from the district's turn of the century buildings was much more ornate. Compton Building architectural details appear in Figure 8b. Most of this detailing has been covered up during recent decades, in attempts at modernization. These facades are prime candidates for restoration.



Provided by the Compton Collection, Brigham City Museum

Figure 9. Historic tree designs. a) Turn-of-the-century, Main Street. b) Late 1800's, Forest and Main Street.

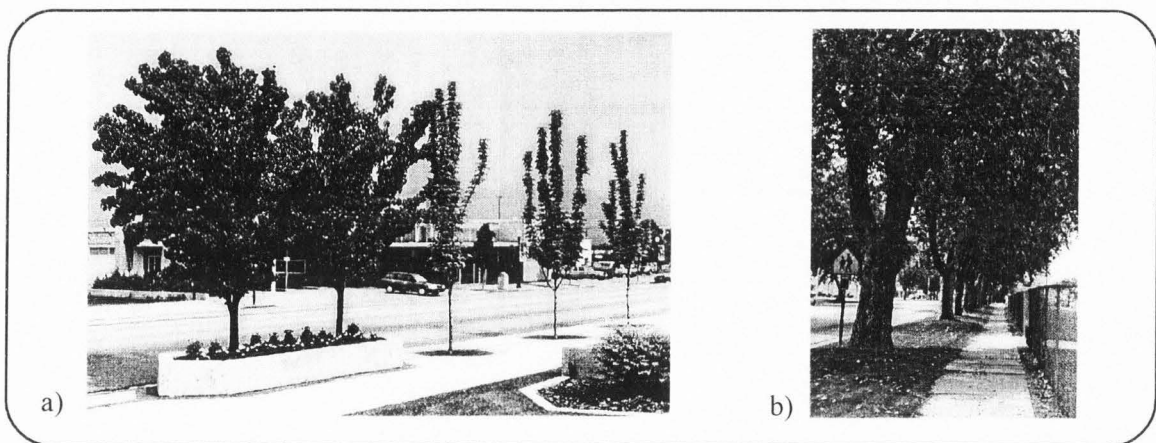


Figure 10. Current tree design. a) 1998, MSD street plantings. b) 1998, Sycamore plantings on Main Street, outside the MSD.

Historic Street Tree Designs. Historically along Main Street there have been few street trees between Forest Street and 200 South (Figure 9a). Street trees found during the early years of the district were planted at the corner of Forest and Main (Figure 9b). Other historically significant tree plantings were the fruit trees in the late 1800's that occupied the yards of several homes fronting Main Street.

Today the MSD design consists of both maples and flowering pears (Figure 10a). The flowering pears occupy planting boxes at street corners while the maples create a rhythm in the interior of the blocks. Outside the MSD, Main Street Brigham City is known for its beautiful and full sycamore trees that run the remaining lengths of Main Street.

CHAPTER III

EXISTING CONDITIONS AND OPPORTUNITIES

Purpose

The review of Brigham City MSD history revealed the district's substantial staying power: the MSD has more often than not realized its potential as a Brigham City community gathering place and commercial center – not unlike the model main streets preferred by J.B. Jackson and Peter Calthorpe.

An appropriate design strategy for the MSD would certainly respect its historic success. But what other elements would that design strategy respond to? Completion of the historical review invited a contemporary site analysis that would acquaint the author with the MSD's existing opportunities and constraints. This analysis would provide a sound basis for the design work to follow.

For convenience and report clarity the conditions and opportunities analysis has been divided into External and Internal influences. The external category includes various city developments that share reciprocal influences on the MSD. The internal category focused on the MSD's built form and includes pedestrian and parking accessibility.

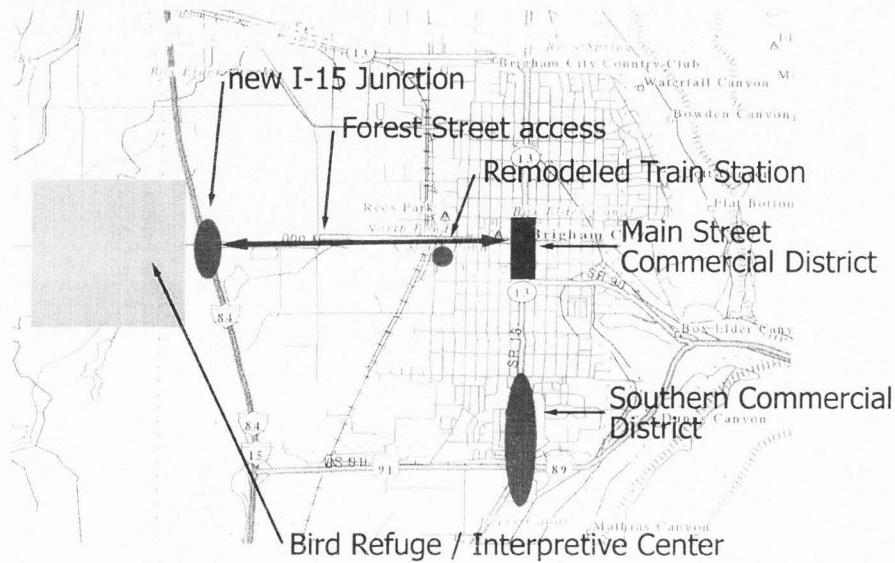


Figure 11. External projects impacting the MSD.

External Influences

There are numerous “outside” influences on the MSD including a commercial center and other current or proposed public-works projects. (See Figure 11) These include:

- 1) New Interstate -15 Junction
- 2) Forest Street Access Improvements
- 3) Train Station Renovation
- 4) Proposed Wildlife Bird Refuge / Interpretative Center
- 5) Main Street / Hwy 91 Development (Southern Commercial District)

Together, these developments comprise an environment of significant potential change. The success of the Brigham City’s MSD will depend on how the city responds to each one. Paul Larson, City Planning Director, presented these projects to the author in March of 1998, through a tour and discussion (Larson 1998).

New Interstate 15 Junction. Recently the town of Brigham City persuaded the Utah Department of Transportation (UDOT) to open another freeway junction into their community. This junction is one of the northern-most significant urban junctions in Utah and is therefore an important Brigham City gateway. The MSD will connect to this junction via Forest Street, which terminates in the center of the district.

Forest Street Access. Forest Street is the main arterial that will connect the public works projects listed above to the MSD. Recent improvements to this street have included wide pedestrian walkways, bicycle paths and tree plantings. As the public projects are completed, Forest Street could become the entry focus for MSD.

The Forest Street access presents Brigham City with a rare opportunity to create a highly visible and effective entry statement for the community. Forest Street's termination at the historic County Courthouse in the center of the MSD is a unique urban design feature. Considering this unique street termination and the several developing amenities along Forest Street, the city should carefully examine the development of Forest Street before allowing the piecemeal development that may take place. Only through careful design, planning, and zoning can the city take advantage of opportunities that exist. Plans should consider avoiding "strip development," and the over-saturation of competitive citywide commercial interests.

Train Station. Brigham City will be renovating its historic train station, located between the Main Street District and the new freeway junction. Its proximity to the new I-15 junction should spur increased northern Utah tourism. Renovation of the station could also help facilitate a proposed Utah Transit Authority commuter train that would run from south of Salt Lake City. As the northern terminus of this commuter line, the renovated station could strengthen Brigham City's ties to the Salt Lake communities. The station could also open regional marketing doors for Brigham City merchants.

Wildlife Bird Refuge / Interpretative Center. West of Interstate 15 is the Bear River Migratory Bird Refuge, which has been an attraction to the area since the 1920's.

Proposed plans for the refuge include a new interpretive center just east of the new interstate junction. With this addition, Brigham City and surrounding agencies will establish a strong corridor of amenities along Forest Street, with the eastern terminus being the Main Street District.

South Main Street / Highway 91 Development. Brigham City has seen little of the strip development that has overwhelmed so many towns since the late 60's and 70's. It has maintained a downtown that remains significant to the community. Now, following the historical pattern of most Western American towns, Brigham City's downtown faces competition from another, more auto-friendly district. Located at the junction of Highway 91 and the southern end of Main Street, this new development is succeeding with fast food and big-box retail stores. This new commercial area may threaten to diminish Brigham City's traditional downtown core if steps are not taken to enhance the current MSD.

Internal MSD Pedestrian and Parking Analysis

The author's survey of the MSD proper immediately revealed the importance of accommodating both pedestrian and the automobile. While other internal elements may contribute to its character, the MSD would lack its uniqueness and identity without the balance of pedestrian and auto use it presently achieves.

Pedestrian Analysis. Richard Unterman, the author of several books and articles on pedestrian oriented streets, expresses the view that "We are all pedestrians" and "all drivers eventually become pedestrians" (Unterman 1991, p. 2). An important corollary of this principle is that a well-designed pedestrian street must be accessible to pedestrians from its surroundings. The present author approached the pedestrian site analysis from this point of view.

Pedestrian Site Analysis

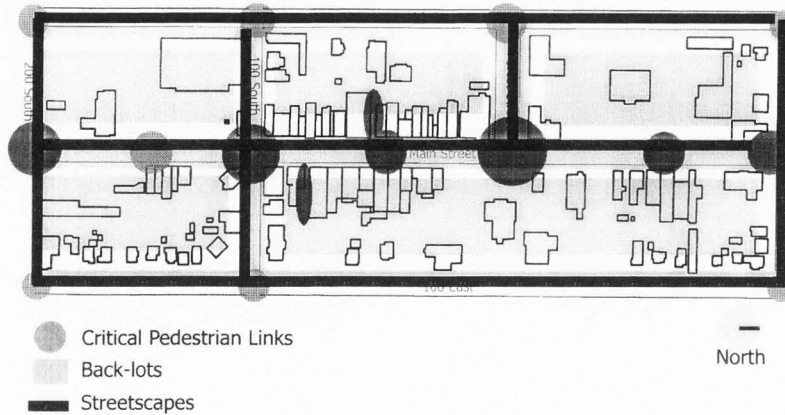


Figure 12. Geographic breakdown of the pedestrian analysis.

The following pedestrian analysis will distinguish between three common areas in the district depicted in Figure 12, which are:

- 1) Streetscape corridors
- 2) Building back-lots
- 3) Connections between the above

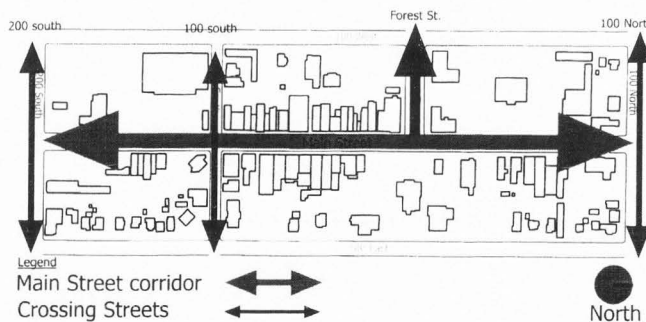


Figure 13. Streetscape corridors

Streetscape Corridors. (Figure 13) Brigham City's Main Street corridor is a pedestrian-friendly corridor. Its wide sidewalks form a strong pathway through the commercial district. This corridor is nicely landscaped, with street trees that provide a cool microclimate in summer months. These trees, as well as the rows of parallel parking along both sides of the street, create a strong separation from the automobile traffic.

Amenities such as drinking fountains and designed paving patterns enhance the corridor. Planters for some street trees could double as seating walls, but they currently do not function this way. Given the available wide sidewalks in the district, bench seating could easily be incorporated.

Windows dominate the corridor's street-level architecture, providing diverse visual interest and drawing attention to the tenant stores. The architecture is close to the street, which creates a good pedestrian scale, but the lack of seating works against extended pedestrian visits.

Crossing streets for the district consist of 100 North, Forest Street, 100 and 200 South. These streets are relatively wide and offer ample pedestrian access, and they could easily accommodate additional pedestrian amenities. Generally, the crossing street's pedestrian aesthetic qualities are not as well developed as they are along the Main Street corridor. Items such as water fountains, decorative paving patterns, and historic lighting are missing. In order to treat the MSD as a visually cohesive district, it is important that the qualities along these crossing streets be improved to meet the level of development along Main Street.

The width of 100 North and 100 South creates a suitable pedestrian scale, which should be exploited with amenities. Forest Street, however, is significantly wider than these streets and greatly needs to have its scale reduced for pedestrians. This should be able to be accomplished with minimal disruption of vehicular traffic flow.

Building Back-lots . The spaces behind the Main Street businesses, used primarily as parking lots, are the most neglected parts of the district and are very unappealing to district patrons. Pedestrians in these areas must maneuver between both moving and parked vehicles, which puts them at risk while limiting their access. The problems faced by pedestrians also work against drivers, who are challenged by the back-lot confines.

The patchwork of land ownership in these back-lots has contributed to problems both in terms of efficient space utilization as well as visual clarity. While some of the parking is for public use, many spaces are designated as private. Much of the land in the back-lots is filled with signs denoting private property. The abundance and haphazard placement of this signage confuses visitors. A clearer distinction would encourage increased use of the area. This could be achieved by simple enhancements in design and maintenance.

Another aspect of visual clarity that needs to be exploited is the development and enhancement of rear entrances for retail stores. A better defined hierarchy of spaces and paths would help pedestrians identify their destination and move towards it.

Pedestrian Connections. (Figure 14) The Main Street District needs to connect to and be accessible from its surroundings. Pedestrian connections, when strengthened, will encourage visitors to frequent the entire district, not just those areas that are close to abundant parking. Existing and potential linkages fall into three general categories:

- a) Intersection crossings
- b) Mid-block crossings
- c) Back-lot pedestrian alleys

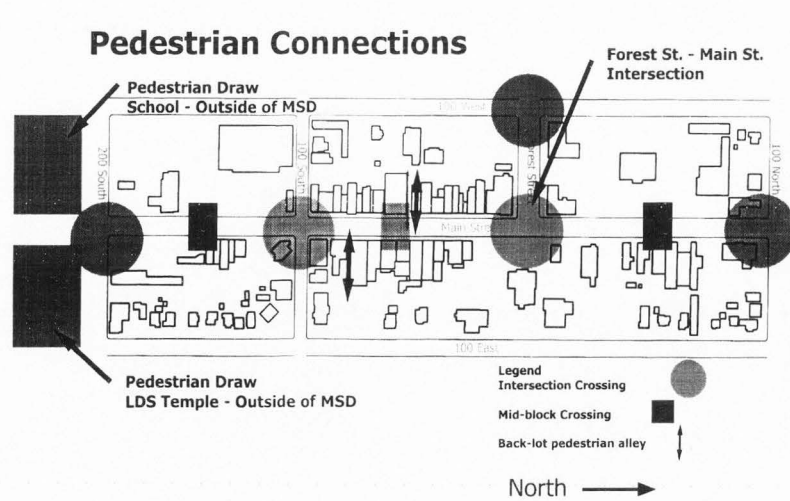


Figure 14. Pedestrian Connections

Intersection crossings. Currently pedestrians crossing at most of the MSD's intersections are reasonably accommodated. Lights and pedestrian zone striping are available at all intersections along the Main Street corridor. The crossing spans at Main Street and Forest Street and at the north-south intersection of 200 South are long, relative to other crossings in the district. At these two intersections the crossing lengths pose a pedestrian hazard. A problem with Main Street is the width of the street and the high volume of automobile traffic it supports. The high density of businesses along both sides, which generates substantial foot traffic, aggravates this hazard.

The intersection at Forest Street and Main, (Figure 15), spans 80 feet, which includes five lanes of traffic and one parking strip. This is a heavily traveled intersection that is in a "T" pattern, necessitating several turning lanes. Currently this intersection is too wide for comfortable pedestrian crossing and should be redesigned to better facilitate pedestrian crossings in all directions.

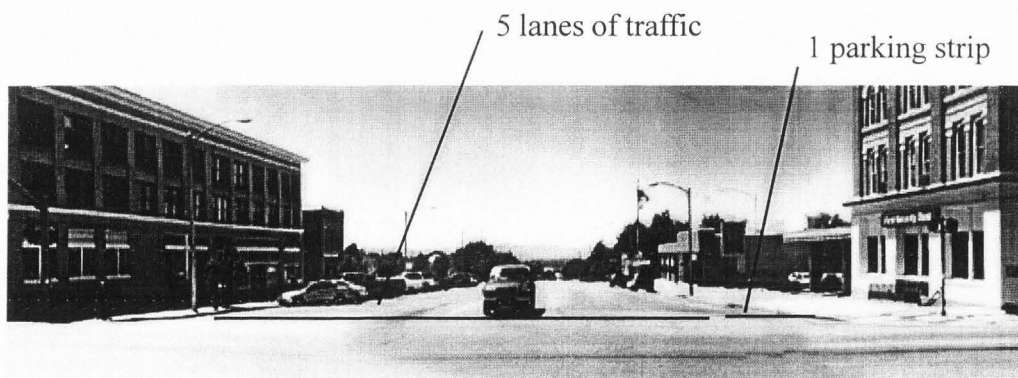


Figure 15. View looking west on Forest Street, at the terminus of Forest and Main Street.

The north-south crossing at 200 South also suffers from the problem of crossing length. This intersection is an entryway to the district, as well as a crossing for users going to and from the Mormon Temple and the school directly south of the district. With high traffic from both Main Street and 200 South, this intersection should be enhanced for pedestrian safety.



Figure 16. Existing mid-block crossing and pedestrian alley under historic arch.

Mid-block crossing. Currently inside the MSD there is one mid-block crossing for each block of Main Street. These crossings are located 1) under the historic arch, (see Figure 16), 2) north of the new First District Courthouse, and 3) fronting Smith's grocery at the south end of the MSD. All three crossings have been striped and signed to designate crossing areas. The crossing under the arch has yellow lights for further warning.

Other design features, such as paving color and textures could help reinforce all of these crossings. Given the high traffic flow, the great length of the district's street, and the density of Main Street's stores, all of these crossings need to be evaluated for better pedestrian awareness and safety.

Back-lot pedestrian alleys. The study revealed a perceived parking deficiency in the central business district. Currently parking is available in most of the lots behind and adjacent to existing buildings, but many of these lots are not easily accessible to Main Street pedestrians. This accessibility issue is crucial because well thought-out improvements would encourage increased use of the commercial core.

Currently there are two pedestrian alley connections along the Main Street corridor, one south of Bert's Café and another south of the arch. The one south of the arch is landscaped with benches and trees, while the other is left to bare concrete. These alleys are important in the pedestrian network, however their visual terminus on the back-lots are uninviting to pedestrians. Improvement of these linkages to increase their effectiveness will be further explored.

Parking

The current parking situation for the district lends itself to improvements in distribution, aesthetics, access, and clarification of private / public spaces. Downtown merchants feel that there is either an imbalance or a deficiency of available parking spaces throughout the district. While there may be some truth to this perception, a few simple design and management enhancements can be made to improve utilization of the substantial space that is available. The following discussion examines both on-street and off-street parking within the district.

On Street Parking. On-street parking is a valuable element for the commercial interests in the district. It is highly visible, easy to access, and often the closest public parking to stores. In addition it is truly democratic, i.e. it does not specify which stores customers must patronize and may be most preferred for the convenience it provides to commercial patrons.

Approximately 162 on-street parking spaces are available in the interior of the district (Figure 17). The majority of these spaces are parallel parking, with a small amount being angled parking on Forest Street. There is little space to increase this number inside the MSD, except for Forest Street. Curb cuts for off-street parking, garage entrances, and drive-throughs limit the number of available spaces. For this reason, additional curb cuts should be discouraged and existing ones re-examined.

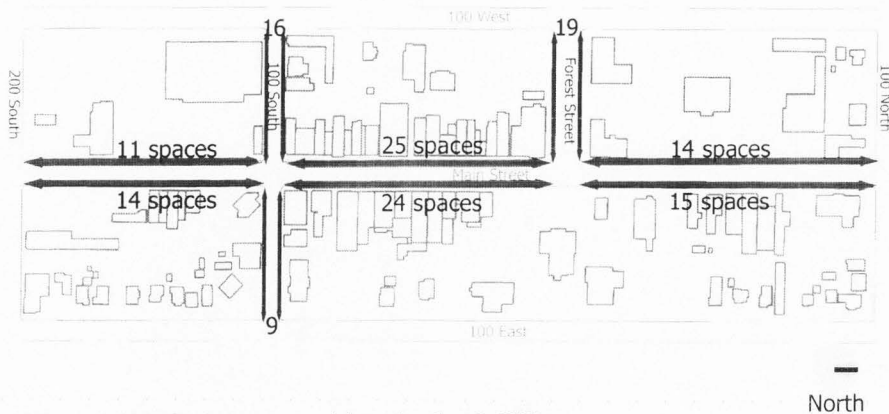


Figure 17. On-street parking in the MSD.

Given the great width of Forest Street, there is significant opportunity for additional on-street parking, with some substantial changes in current uses and lane designations. The wide right-of-way of Forest Street allows room for angled parking along the length of the block, which would greatly increase the number of on-street parking spaces available to the district core.

Currently this cannot happen with the number of curb-cuts on the north side of the street and the existence of the fire station on the block. The fire station demands easy access and unimpaired views for the fire trucks housed at the facility. The station's five bays require an extensive curb-cut, preventing on-street parking for the north side. Also on the north side of Forest St. there is a large curb-cut for three lanes of traffic departing the bank, plus two curb-cuts for easy access to off street parking. Consolidation of curb-cuts, and the eventual reorientation of the fire station could greatly increase on-street parking for the district.

Off-street Surface Lots. There are several large ground level parking lots within the MSD, as indicated in Figure 18. Although perceived as public parking, many of these lots are private or dedicated to governmental agencies, including Boxelder County, the

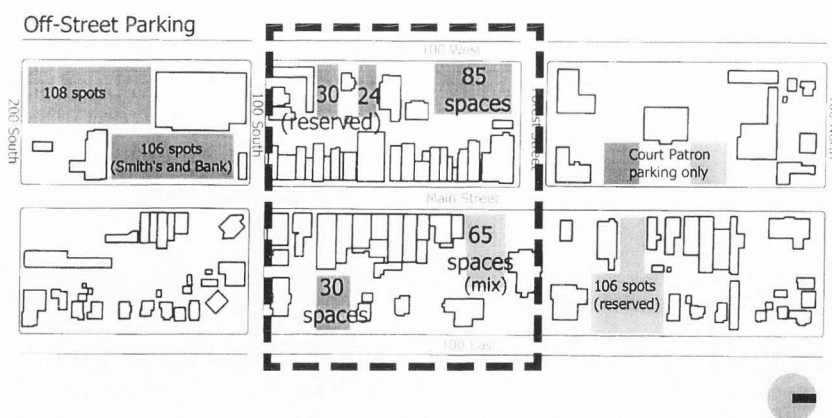


Figure 18. Parking lots commonly used for public use, although not necessarily intended for public use. Dashed box indicates the area that is further explored in Chapter 4 regarding parking-pedestrian network enhancements.

Brigham City Corporation, and the State of Utah. Much of the surface area which is being used to park city and county vehicles would be excellent accessible public parking. The city should consider acquiring the private lots or incorporating these lots into an overall public parking plan. Given the strong civic core, a centralized multilevel parking structure for governmental vehicles should be considered. This could free up surface parking for public parking lots.

Aesthetic and maintenance issues also plague many of these back-lot-parking areas. Out-of-sight and out-of-mind, these areas are left to become bleak, dirty and uninviting places. The lack of maintenance and amenities for users discourages use and lends to the problem of vague spatial distribution. There needs to be a better clarification of private and public parking spaces.

Amenities such as trees, landscaping, and better paving materials could help improve all of these areas. Trees and landscaping could help provide aesthetic and cooling benefits for its large areas of asphalt, while paving patterns could help define pedestrian zones. These amenities may add additional costs, however the benefit would be a better use of valuable parking areas.

CHAPTER IV

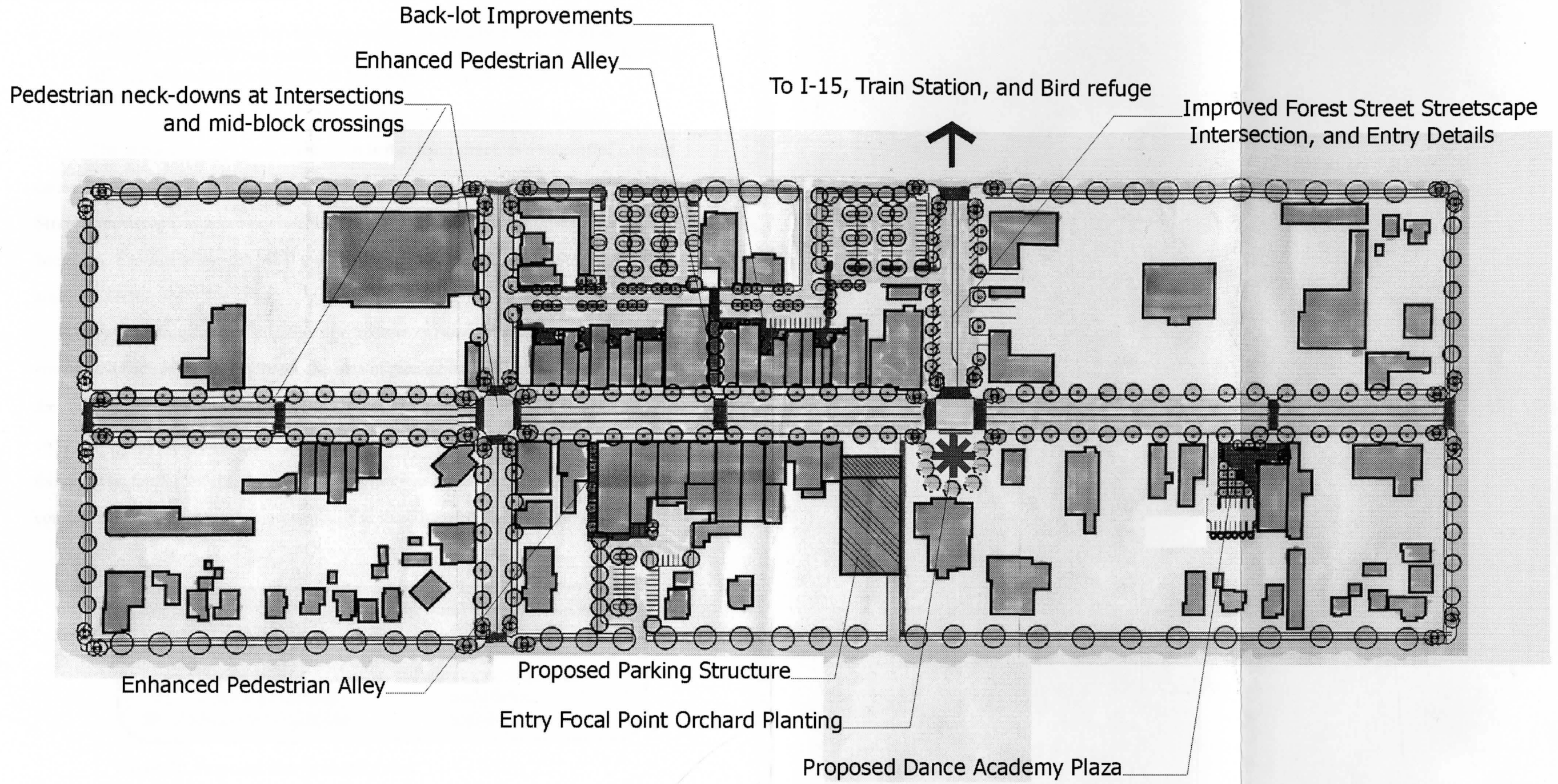
DESIGN PROPOSALS

Design Goals.

The driving concept for the following design proposals and Master Plan is to respect the historic form and character of the MSD while enhancing the modern accessibility needs of both the pedestrian and the automobile inside the MSD(Figure 19). Based on this concept and the preceding information gathered in this report, the scope of the proposed improvements was narrowed to three specific design program goals, which are:

1. Reinforcing a district identity
2. Enhancing the pedestrian network
3. Enhancing the public parking network

The following planning and design recommendations offer reasonable proposals that meet the concerns presented in the earlier sections of this report. These suggestions are presented in the form of a master plan, conceptual design plans, design guidelines, and simulations.



Brigham City, Utah: Main Street District
 Master Plan - Pedestrian / Parking Public Improvements
 Utah State University - Dept. of Landscape Architecture and Environmental Planning

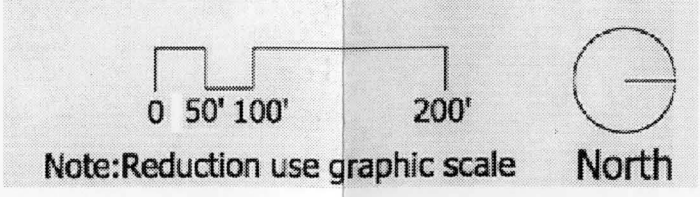


Figure 19. MSD Master Plan.

Goal: Reinforce the District Identity

Districts - “are the medium-to-large sections of the city, conceived of as having two-dimensional extent, which the observer mentally enters ‘inside of’, and which are recognizable as have some common, identifying character.”

(Kevin Lynch, p.47. 1960)

The implication of Lynch’s definition is that main street, as a successful concept, cannot be perceived as a single street. Visitors to Main Street rarely experience only Main Street’s streetscape, as necessary circulation and parking occur on adjacent streets and back-lots. For this reason the MSD must be recognized as encompassing the entirety of adjacent blocks.

By providing consistent streetscape treatments along crossing streets, adjacent streets, and back-lots of Main Street, the idea of the district will be reinforced. Many of the following suggestions borrow existing successes from the Main Street streetscape and carry these treatments throughout the area, street trees being one example. In addition to the aesthetic reinforcement, the following suggestions are proposed improve pedestrian comfort and clarify automobile accessibility in the commercial area (Figure 20).

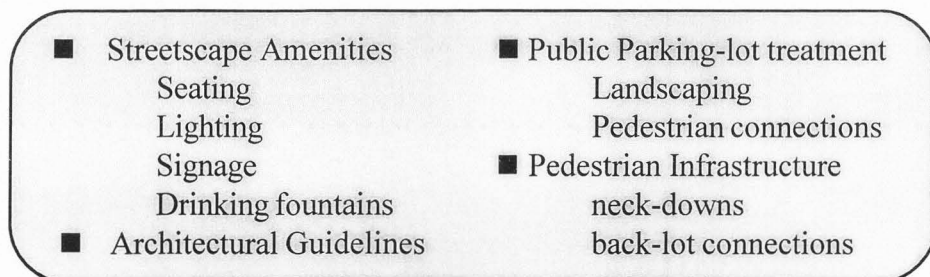


Figure 20. Proposed district identity cues.

Action: District Streetscape Furnishings. Brigham City’s Main Street is currently well outfitted with pedestrian amenities. However, these amenities and furnishings stop at Main Street, and the rest of the MSD is left unfurnished. These elements need to be extended throughout the district (Figure 21). In addition, benches should be provided on the street.

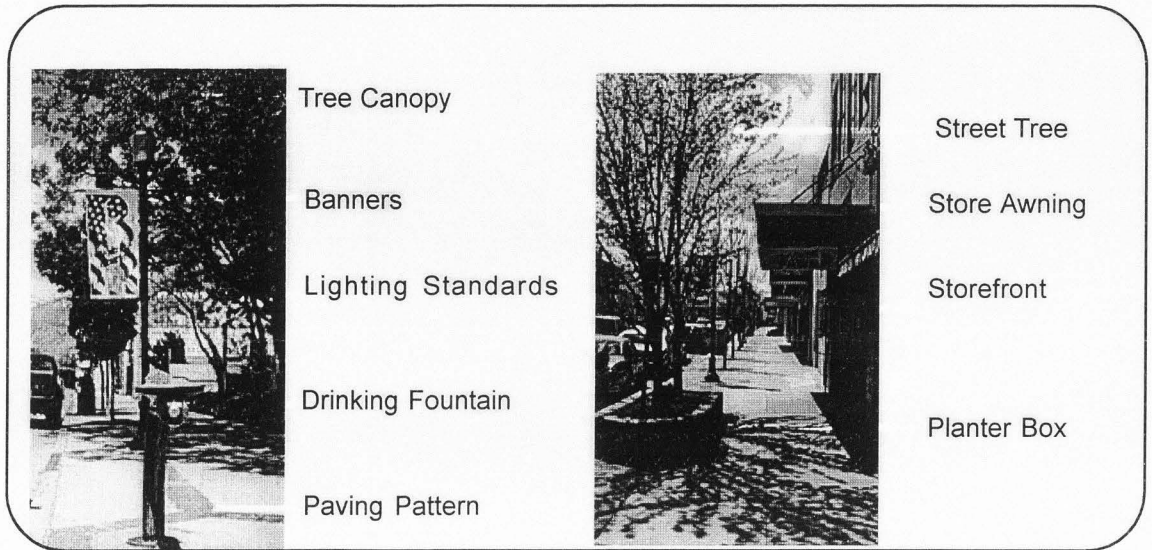


Figure 21. Existing streetscape furnishings along Main Street.

Action: Street-Tree Design. There is a pattern to the street-tree planting that exists along these three blocks of Main Street. At each Main Street intersection there are two flowering pears (*Pyrus townsendii*) in a raised planter, followed by columnar maples at regular intervals. This pattern creates a nice aesthetic rhythm to the street, creating a distinctive identity. This treatment should be continued along the side streets, as a way of unifying the whole district. Mature sycamores currently exist along the three adjacent MSD blocks of 100 East and 100 West. These trees are soon to live out their life-cycle and will need to be replaced. In order to maintain a continuous sycamore tree canopy along these streets, sycamore should be replanted where and when opportunity allows.

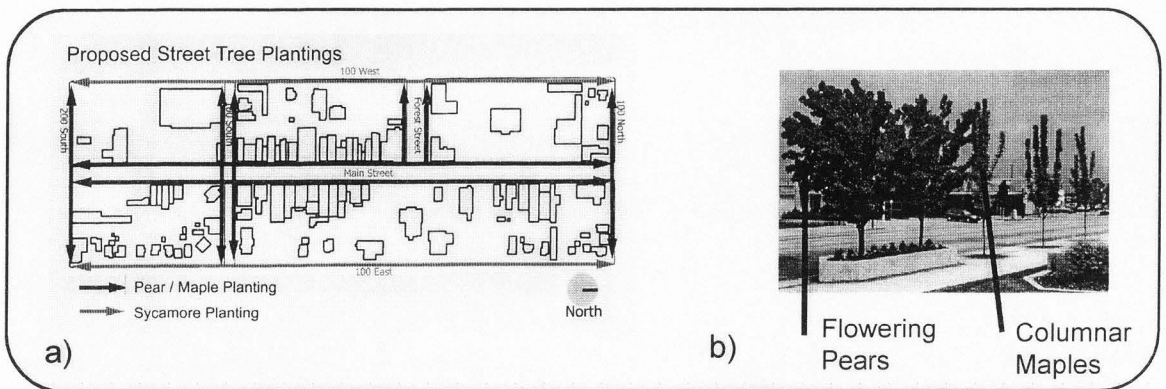


Figure 22. Proposed street tree planting a) Diagram of proposed street-tree planting. b) Photo of existing pattern of street-tree plantings inside the MSD.

Action: Pedestrian Architecture. Architecture plays a key role in the definition of a streetscape. The historic design and placement of Main Street's architecture sets the district apart from other commercial areas in the community and continuation of existing styles will help to maintain and reinforce the identity of the district. The close set-backs, building scale, and window size and spacing along Main Street currently produce a welcome atmosphere, especially for pedestrians. The following guidelines are encouraged to maintain this strong appeal for future patrons, specifically pedestrian users (Figure 23).

- Renovate historic building facades
- Restrict new buildings to be no larger than 15' high for single story, 30' for two stories
- Require new buildings to have cornice, clerestory windows, display windows, and kickplates below display windows
- Entries are to be recessed
- Provide historic styled awnings along street-fronts and back unrecessed entries. Materials should be canvas or wood to fit into historic character of the MSD.



Figure 23. Pedestrian-friendly architectural guidelines

Action: Enhanced Signage. Consistently designed and strategically located signage could greatly enhance the clarity of the district and promote increased use. Public parking and private property signs should be encouraged to use a consistent sign style to make it easier for patrons to distinguish private from public. In addition, there should be a general information kiosk located at the edges and the center of the district

A design competition should be considered to generate appropriate signage and graphic styles. Predetermined criteria should specify the need for a historic theme, form, or material that relates to the community. Pragmatic factors, such as readability, size, cost, durability, and production capability should also be defined. The competition would foster pride, interests, and local “ownership” of the MSD, by affording a venue for the work of regional artists, craftsmen and designers.

Action: Develop New Civic Plaza. The Civic core along Main Street has had a long tradition in Brigham City, and there is a new opportunity to add to this part of the MSD’s identity. City officials have recently decided to purchase the historic dance hall building, known as the Academy Building, and have it restored. This would create an opportunity for the MSD to increase its vitality as a multiple use center that would extend beyond the regular business hours of the day. The renovation will set the stage for other opportunities adjacent to the dance hall, specifically a public plaza. This proposed plaza would require the acquisition and removal of the two adjacent buildings to the south of the Academy building (Figure 24).

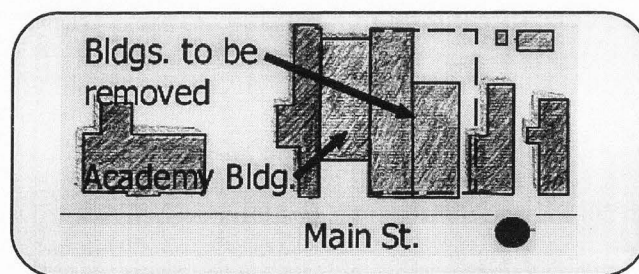


Figure 24. Proposed plaza location.

The following is a suggested course of action that the city should follow to take advantage of the opportunity that is present:

- 1) Acquire adjacent buildings specified in Figure 24.
- 2) Determine specific design criteria for development of the adjacent plaza.
- 3) Publish a request for proposal for design services to create the proposed plaza.

The following is a set of core requirements to be included into the proposed plaza's RFP.

- Regional artistic attraction: the plaza should provide a space or artistic work that is recognizable as a civic monument, and regional landmark.
- Incorporation of an orchard: the orchard concept is an attempt to bring back the orchards that historically were found on residential lots along Main Street. This orchard would be a celebration of the town's and county's history, and could have strong ties to the annual Peach Days celebration.
- Historic materials: the plaza should incorporate the use of historic materials and native materials. These materials could range from native plants, to quarried stone. Other amenities such as lighting, benches, and signage should also carry the historic and regional flavor of the MSD.
- Hierarchy of spatial uses: the plaza should offer spatial flexibility, allowing the capability to accommodate multiple uses. The following activities might be anticipated to take place in this space: community fair, individual leisure, waiting and gathering spaces for crowds attending events in the Academy building, and small to medium sized community exhibits, classes, political rallies, etc.
- Minimum-parking development: parking for the Academy and the plaza would be minimal on the site, catering to only necessary service, disabled, and VIP parking.

Goal: Enhance Parking and Pedestrian Network

Parking and pedestrian networks directly affect district commerce, and enhancements in these areas create a more inviting commercial district for consumers. The two items are not separate problems when one considers that parking is most likely one of the destinations that the pedestrian is seeking. The following suggestions offer a comprehensive network of pedestrian links and public parking improvements in the MSD. Pedestrian enhancements will be addressed first, followed by the parking improvements. Although these concerns are addressed separately it should be reiterated that the two are not inseparable in the success of their application.

Figure 25 shows a diagram of the blocks flanking Main St., between Forest St. and 100 South. These blocks were chosen because of their central location to illustrate the types of parking and pedestrian changes that would improve the MSD. Given their central location, these blocks would be an ideal starting point for the community to investment into the MSD's parking problems. Other blocks in the MSD could benefit from these suggestions, however the changes would most likely be undertaken by the private land owners.

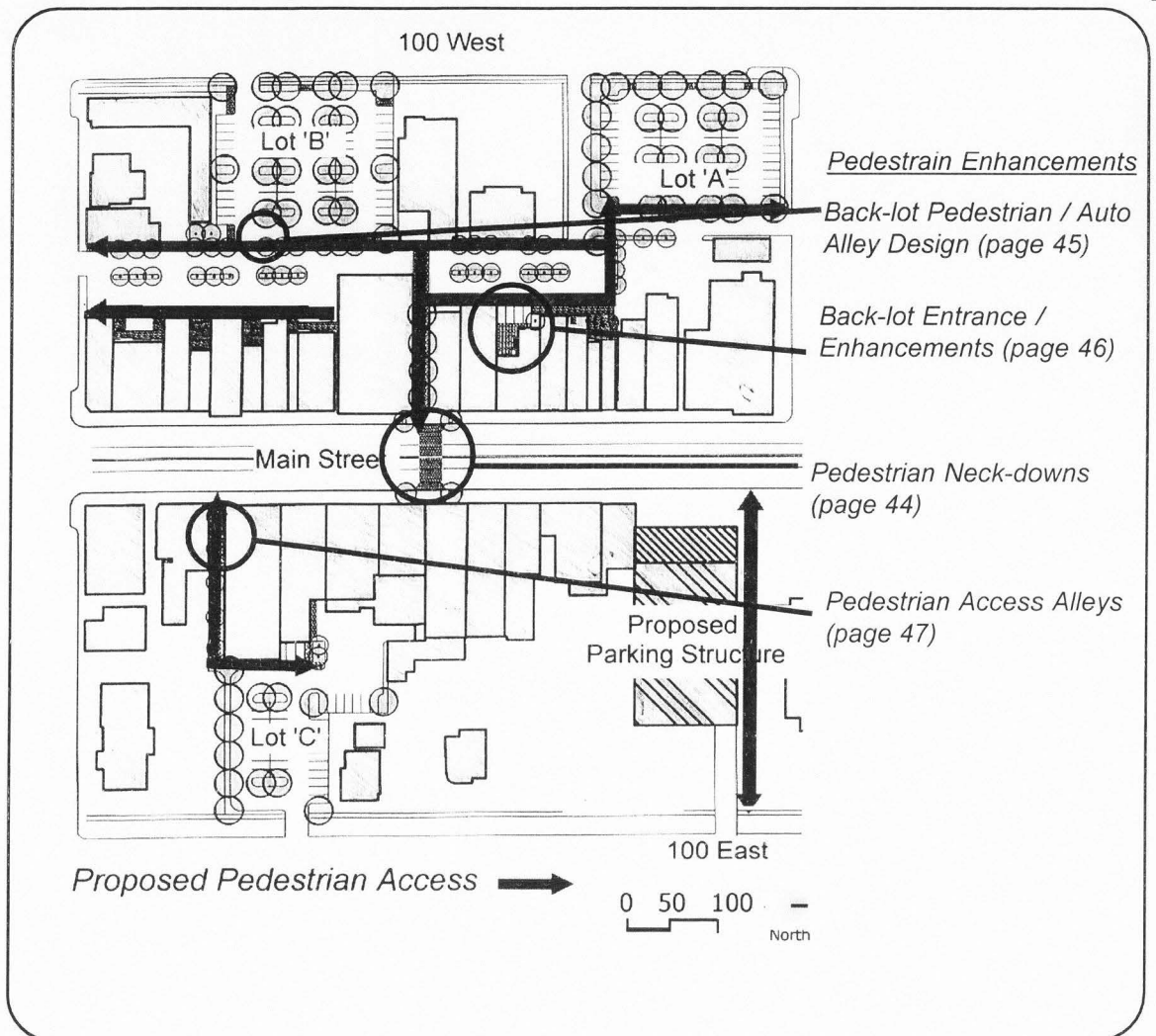


Figure 25. Proposed pedestrian / parking network.

Action: Pedestrian Neck-downs. Pedestrian improvements and streetscapes have been consistently updated, however given the recent population growth of Brigham City and the consequent traffic increase on Main Street, it is time for another level of upgrade. Pedestrian neck-downs at street-crossings and mid-blocks are being proposed to provide safer pedestrian crossing on the busy streets that make up the MSD (Figure 26).

Neck-downs are minimal extensions of a grade separated sidewalk into the intersection of street right-of-ways. These extensions are slightly raised from the street grade, precluding automobile access. They provide a clear view of the pedestrians

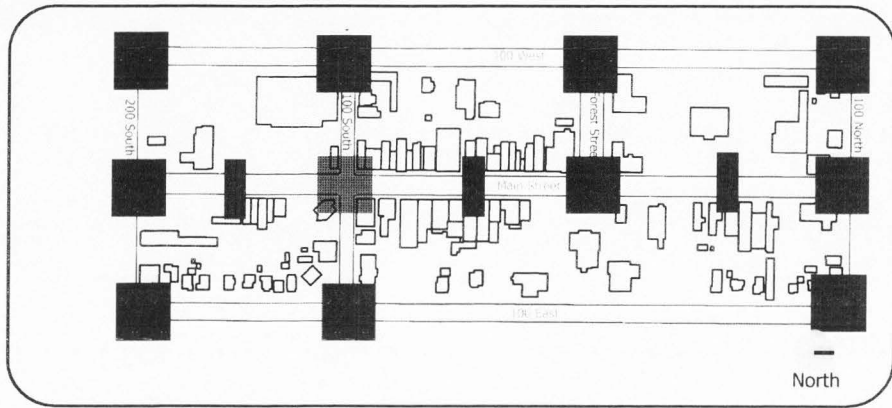


Figure 26. Proposed neck-down locations.

intending to cross the street. This helps both the pedestrian’s and the driver’s awareness of each other. Additional design elements, such as material, texture, and color differences between the street and the crossing areas, help reinforce the distinction between automobile and pedestrian zones.

As a traffic calming device, neck-downs have been used with much success in other towns in Utah and throughout the country. While they slow traffic and may pose a slight inconvenience for drivers, they provide a side benefit of increased visual exposure for commercial store fronts. Figure 27 illustrates proposed neck-downs for both intersections and mid-block crossings.

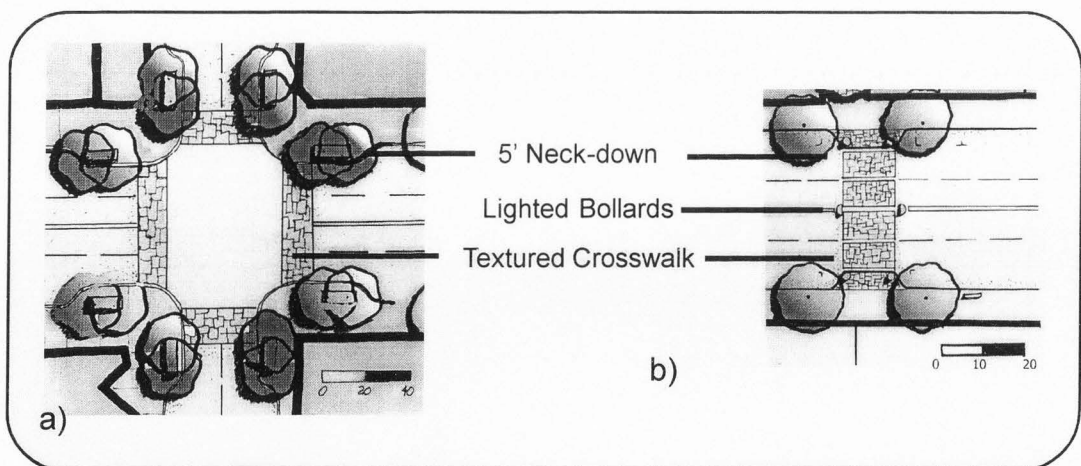


Figure 27. Plan view diagrams of proposed pedestrian neck-downs, a) crossing at intersection, b) crossing at mid-block.

Action: Pedestrian / Auto Alley Design. This network would provide a distinct area for pedestrians, yet still allow for necessary services and accessibility for automobiles. The proposed path system would connect the parking lots and existing streetscapes along the backsides of commercial businesses (Figure 28). They are not intended to substitute for the Main Street streetscape, but rather to enhance the linkage between parking and commercial stores. The pedestrian sections would be delineated with different colored and textured concrete, as well as being grade separated where appropriate. This network would be put in as a public enhancement by the city, as an encouragement for building owners to look at the potential of their back-lot entrances. Figure 31 is a presentation board that demonstrates the potential back-lot improvements.

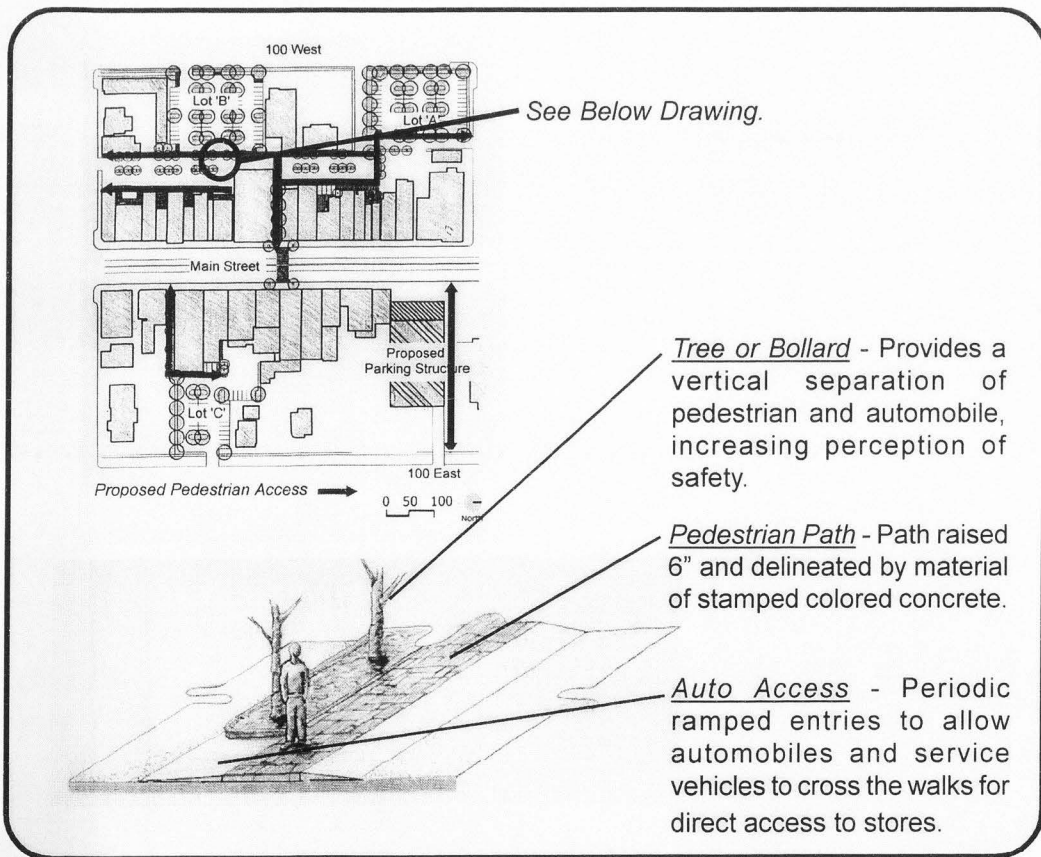


Figure 28. Proposed back-lot pedestrian network.

Existing back-lot - potential improvement site

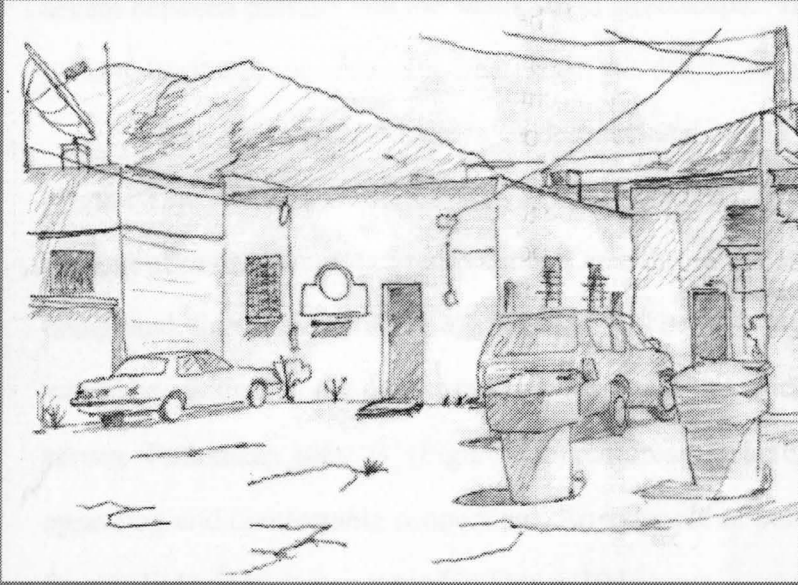


Figure 29a. - One existing back-lot inside the MSD.

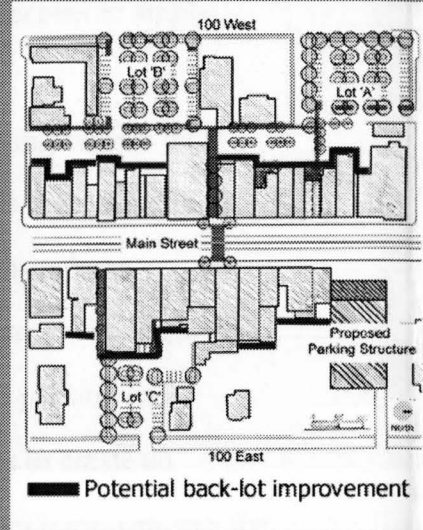


Figure 29b. Potential commercial back-lot improvement sites.

In response to the city's construction and renovation of a back-lot parking and pedestrian network, back-lot improvements could be done by the owners of each property. These back-lots offer the closest entrances to the large parking lots available at the rear of the building. In their current state, many of these entrances are not being used to their full potential, and with a little renovation they would become a valuable amenity for commercial retailers.

A goal for back-lot renovations should be to clearly identify back-entrances and parking spaces available for public use. These opportunities are unclear to visitors in the present condition, given the lack of maintenance and clear signage. Aesthetic renovations, maintenance, and signage would help clarify these issues for each store. Stores that wish to take advantage of the back-lot opportunities would benefit from the convenient parking for customers, while other stores could better preserve necessary service parking with clear signage. As more of these back-lots become improved, a more appealing and competitive district would be created.

Simulated Improvements

The construction of the public pedestrian and parking network defines a broad pattern of private and public spaces. With this clarity established, private building improvements would then further enhance the MSD. Renovations to individual spaces would include the items listed under the District Identity section of this report (page 37). This simulation shows the difference that an appealing entry might make.

Currently much of the necessary services such as garbage removal and deliveries are made in these back-lots; conflicts between services and retail use could be minimized with a block by block comprehensive service design. This plan would require the participation and input of all store and building owners.

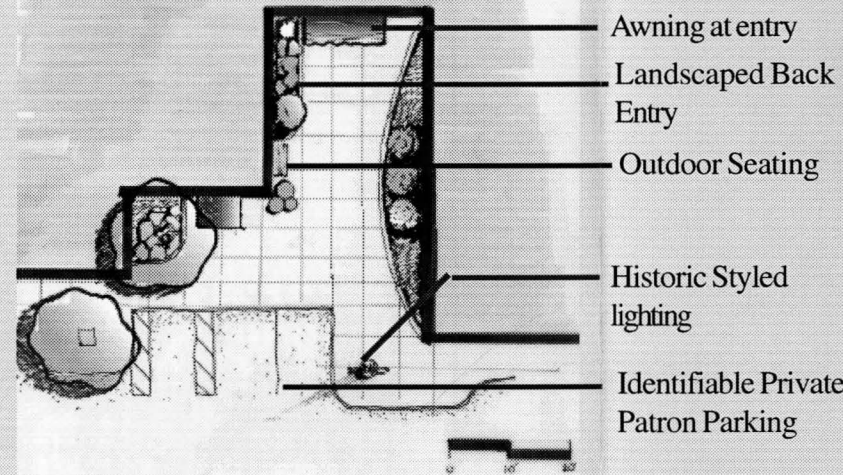


Figure 29c) - Plan view of proposed back-lot changes.

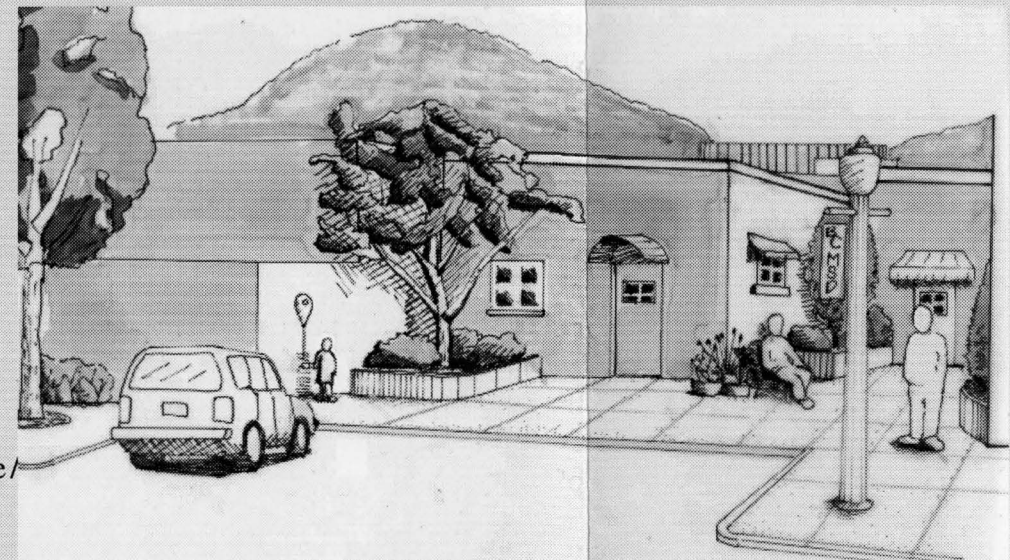


Figure 29d. Proposed back-lot changes.

Action: Back-lot Pedestrians Access Alleys. The renovation of these access alleys is crucial for the success of the public parking enhancements. These alleys facilitate access between parking and the Main Street streetscape. This ease of access to ample parking is vital to the economic interests of the district (Figure 30).

There are two access alleys, each associated with a public parking surface lot (Figure 31). The alley referred to as Pedestrian alley 'A' in Figure 30a requires a small amount of maintenance and renovation. Once the subtle renovations have been completed, this alley would be a good model. The most significant design challenge would be continuing the pedestrian network to the proposed enhanced parking lot it serves. Pedestrian alley 'B' (Figure 30c) requires substantial upgrades to create an appealing and comfortable connection. An example of potential design improvements for this linkage is demonstrated in Figure 30d.

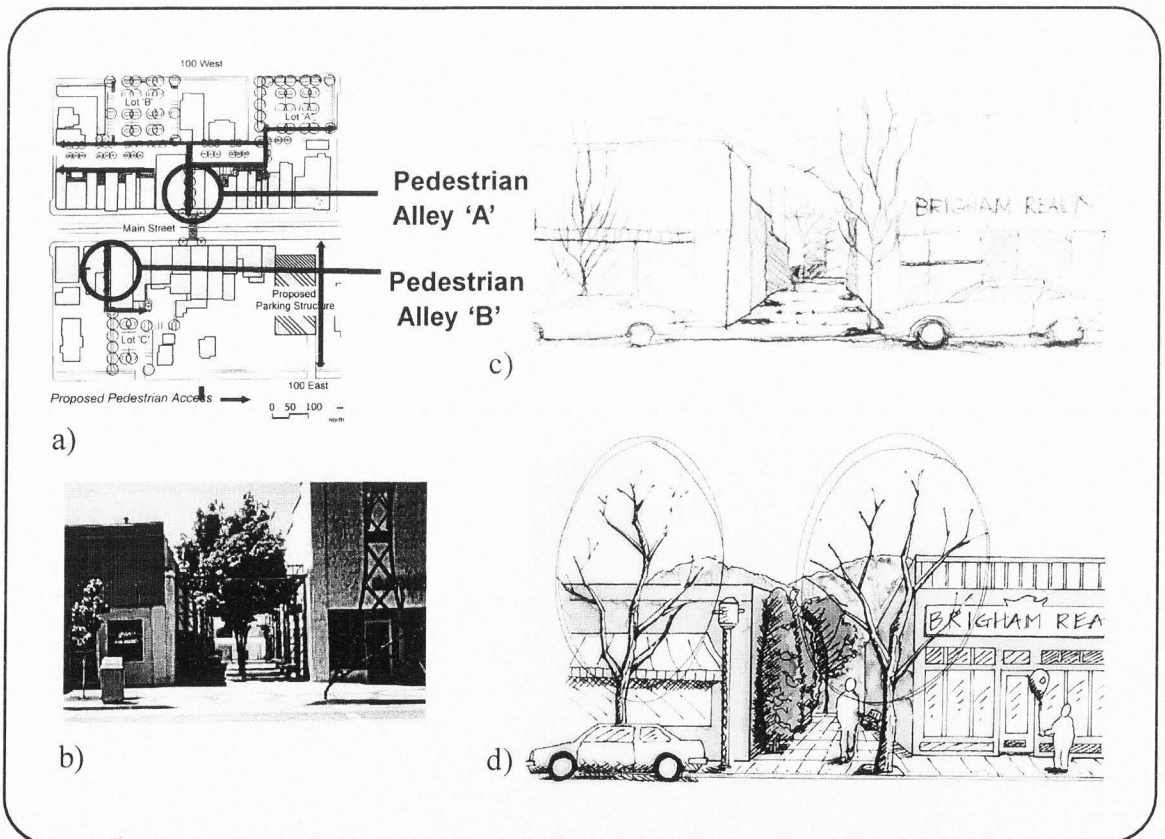


Figure 30. Pedestrian access alley exhibits: a) Map of existing alleys, b) existing Alley 'A', c) existing Alley 'B', d) Potential for Alley 'B'.

Goal: Improve Public Parking Network

The primary objective of the following design is to create a comprehensive and distinct MSD public parking network that serves the commercial needs of the MSD. The city, with the time and interest that it has placed in MSD, must strongly consider purchasing the necessary lots to implement this plan. Currently government agencies dominate the amount of surface space used for parking. If the MSD is going to maintain its commercial interests, it needs the city to help accommodate opportunities for commercial parking. A conceptual diagram of the proposed network is shown in Figure 31.

Three surface-lots and accompanying pedestrian links are proposed for construction and enhancement. One parking structure, to be used for government vehicles, is also proposed to help consolidate parking stalls allocated for government use within the district. Exact numerical gains and loss for each proposed lot are discussed later.

Consistent use of building materials, planting, and signage to public parking lots would create an identifiable network of public parking lots. Enhancements would serve the following functions:

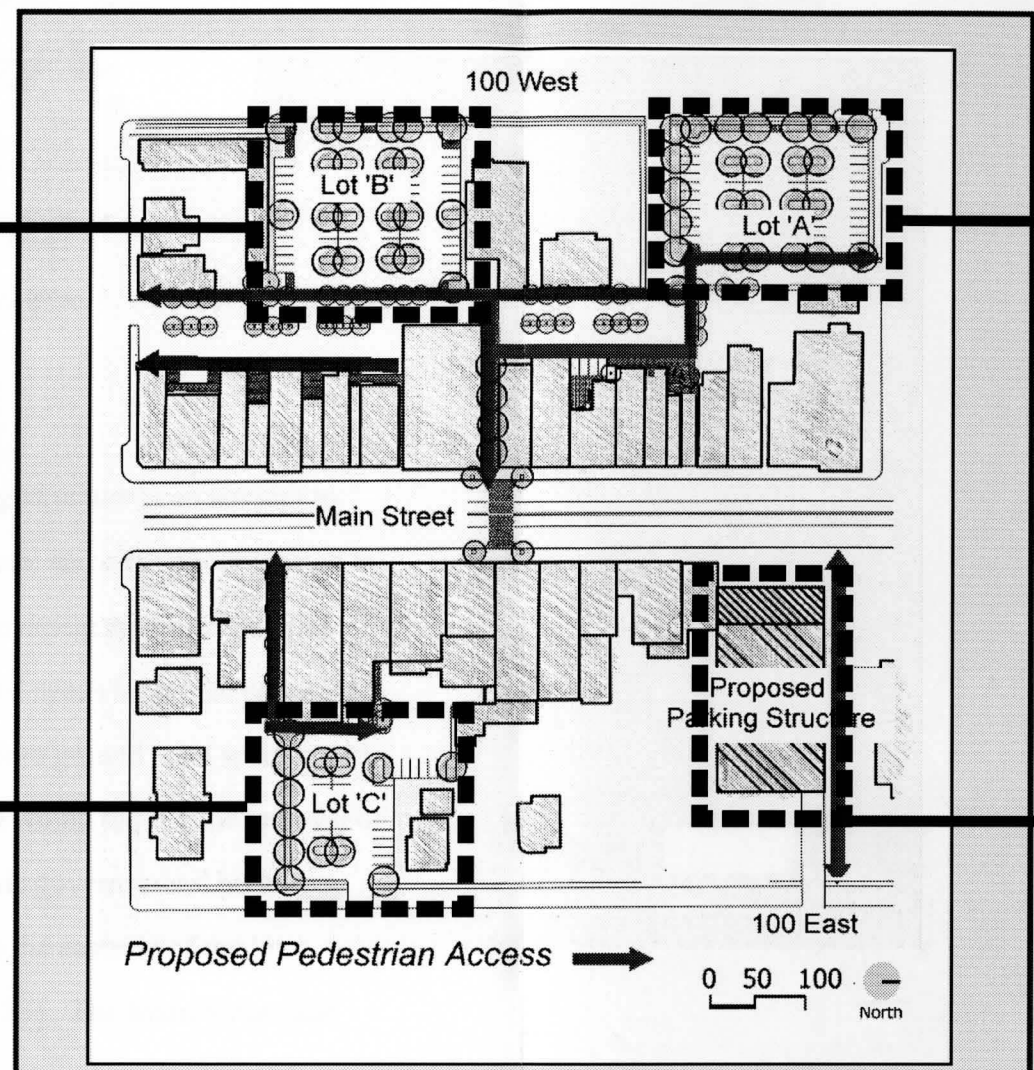
- 1) Create an identifiable border between the public lot and adjacent areas.
- 2) Create pedestrian zones that would link to outside pedestrian walks.
- 3) Create a cooler microclimate, and visually appealing setting.

Action: Bio-Swale Parking Islands. Traditional urban parking lots concentrate stormwater runoff laden with pollutants, including oil residuals, salt, and others. These lots lead to great amounts of consolidated runoff, often causing flooding. Traditional lots sheet the water off into underground sewer systems. An environmentally sensitive alternative known as the bio-swale approach collects the water into earthen drainage swales. In these swales the water percolates into the soil, naturally cleaning out the polluting particles, and reducing runoff amounts. Figure 32 is a conceptual diagram of this process. Additional information can be obtained from the Center for Urban Resource Management at the University of Washington. (Thompson, 1996)

Offstreet Parking Network

Parking Lot 'B' -
 This lot would combine two existing lots and the space occupied by an existing residential building. Currently these private lots get very little use and offer a surplus of unused space. The combined capacity of these two lots is 54 spaces. With the acquisition and removal of the residential building, the expanded parking lot would provide a public lot that would offer 62 spaces, with landscaping. The acquisition and enhancement of this lot would help replace the loss of spaces from the newly landscaped Lot 'A'. This redistribution of spaces would create a better parking balance between the north and south ends of the block.

Parking Lot 'C' -
 This is the closest public parking lot to several of the larger retail/commercial buildings along the east side of Main Street. With some simplification and landscape enhancements to the parking lot, retail back-lots and pedestrian alley, this lot would help balance the needs of the visitors of the district. The proposed parking enhancements would provide 40 spaces, as opposed to the current 30. Additional spaces could be accommodated by purchasing some of the abutting bank-building's extra drive-through lane, which do not seem to be maximizing the use of the space.

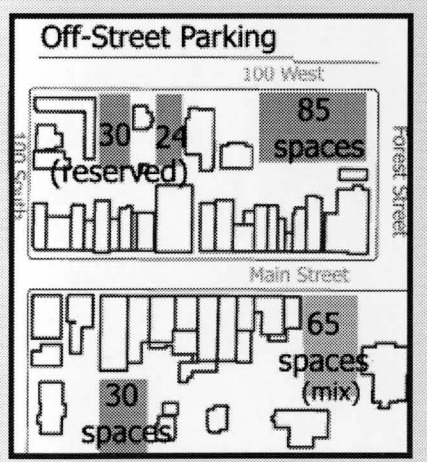


Parking Lot 'A' -
 This heavily used lot suffers from a disjointed and indistinct boundary between it and the surrounding private lots. This lack of clarity creates confusion as to where public parking is permitted. In addition, stalls and service lanes are poorly defined. Clarifying the borders of this lot would help, not only this lot, but also the surrounding private lots.
 The existing number of stalls at this lot is counted at 85, however this number is somewhat misleading because of the lack of parking stall striping and the mix of private and public parking spaces. The proposed renovation and landscaping reduces this number down to 62 spaces. However with the complete network of renovated parking lots, the 23 lost spaces would be added elsewhere, creating a more dispersed public parking inventory.

Parking Structure (proposed) - Currently most of the surface parking on the east side of Main Street is reserved for government vehicles. By dedicating this new structure to those vehicles, it would open up additional ground level parking for public commercial use (see page 39).

The above drawing is the proposed parking and pedestrian network simulation of the 100 South Block on Main Street.

The graphic to the right shows the current parking space numbers for the parking lots. Not shown in the graphic is the current lack of parking clarity, maintenance and pedestrian comfort that exists at these lots.



On-Street Parking - Simple striping of on-street parking can be made to the blocks running perpendicular to Main Street. The potential exists for an increase in the amount of parking along Forest Street by converting to exclusively angled stalls. Although current land use configurations do not allow this change, the possibilities should be considered in the event of the relocation of the fire station. The less drastic plan, shown in Figure 35 would increase this number from 19 to 22 on-street spaces.

Figure 31. Offstreet parking concept plan.

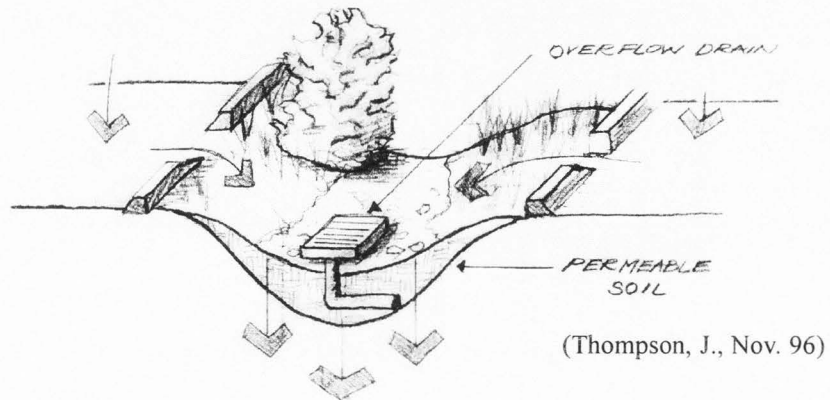


Figure 32. Bio-swale integrated into a parking lot.

Action: Parking Structure. The proposal for a parking structure is an attempt to consolidate the parking allocation required by the county, state, and city offices located in the MSD. Surface parking presently dedicated to these government automobiles often remains vacant, which is in direct conflict with the commercial needs for public parking. By consolidating these vehicles into one vertical structure, more ground level space could be freed up for public parking. The proposed location, which would require the removal of the currently vacant county jailhouse, is close to accompanying governmental buildings.

Alternative 1 would place the three-story structure to the eastside of the lot, adjacent to 100-East, with access from 100 East (see Figure 33). The Main Street side would be a surface parking lot, much as it is now, with landscape enhancements and

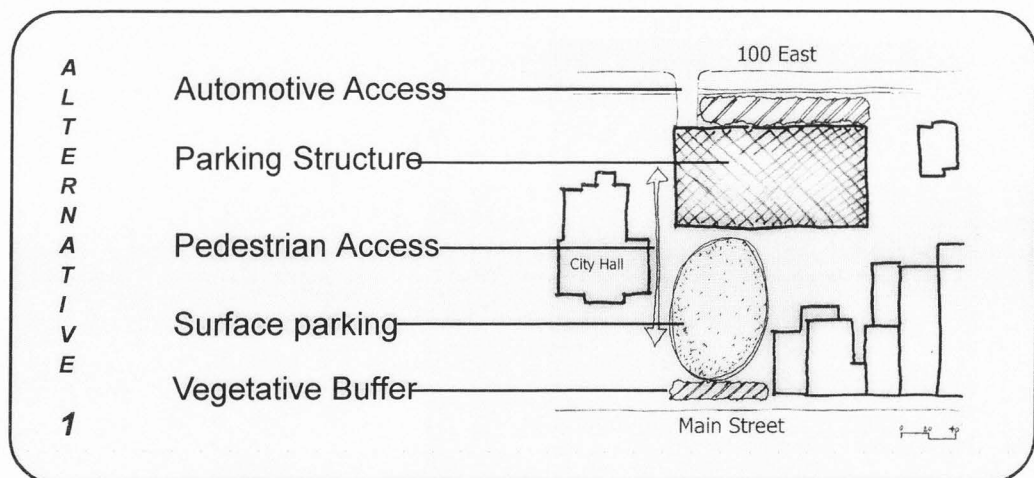


Figure 33. Alternative 1 parking structure.

buffering. The vegetative buffer would hide surface parking, but still allow views to City Hall. This surface lot would be for public commercial use.

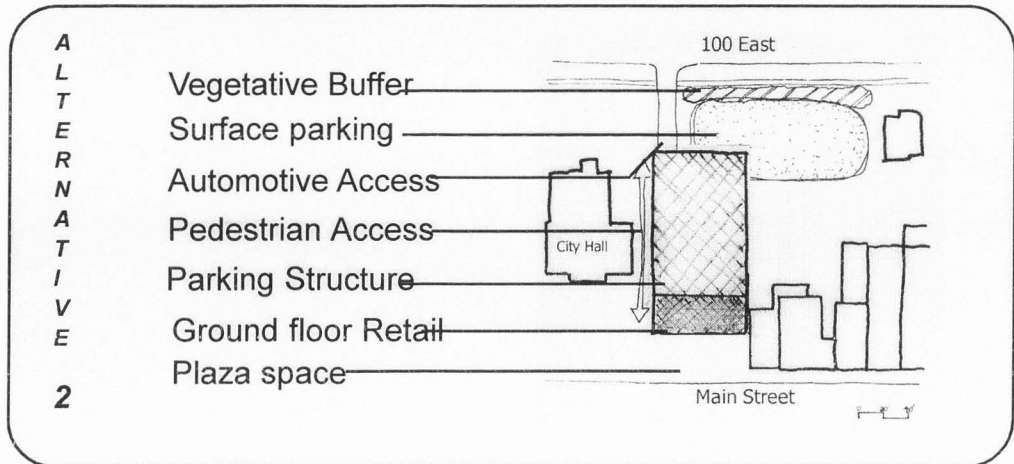


Figure 34. Alternative 2 parking structure.

Alternative 2 would be the inverse of Alternative 1 in placement, with the structure directly abutting Main Street, and access from 100-East. Adjacent to 100-East would be a buffered surface parking lot, for use by government or public vehicles. To maintain the character of the block, the Main Street portion of the structure would be commercial space with a facade to match its historic surroundings. The structure would be slightly setback from Main Street to allow a view of the City Hall building when traveling north. This setback space would then be enhanced as a plaza that foreshadows the civic core to the north.

Forest Street - Streetscape

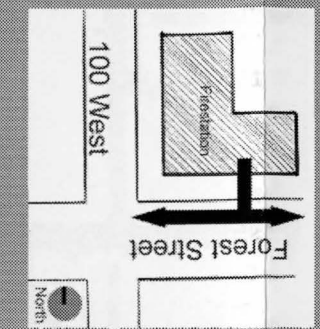
Forest Street has a big future in the development of Brigham City and the MSD. This road will be the connection to the freeway and several town amenities, as discussed in the contextual site analysis of this project. It has the potential to be the gateway to the city and the MSD. Below are some of the proposed design developments that would help create a strong identifiable district.

This scenario of Forest street is based on the proposed fire station realignment, that would allow for greater streetscape enhancements. Included in this design development proposal are pedestrian neck-downs, angled parking, and the reduction of turning lanes at the east end of the street. These changes would help slow district traffic, as well as increase parking opportunities. Other consequences of this scenario may lead to greater use of 100 West for through traffic, which was one of the goals of the 1988 Brigham City Master Plan.

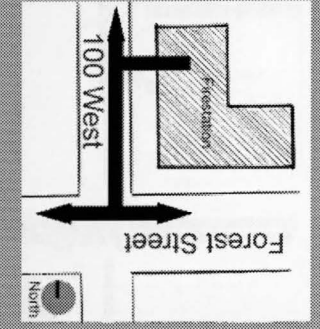
Fire Station Orientation Proposal

Currently the fire station at the corner of Forest Street and 100 West limits the potential for streetscape improvements along Forest Street. Fire stations require a clear and unobstructed view at their exit, and extensive curb-cuts. The location of the fire station is ideal, given the central location and accessibility to arterials going in four directions. Recently it has been proposed to replace the building with a new station at this location. The following proposal is in response to this new station. The diagrams to the left illustrate the idea of reorienting the exit driveway of the station to 100 West. This orientation would allow for a better streetscape design along Forest Street, which is a major entry to the district.

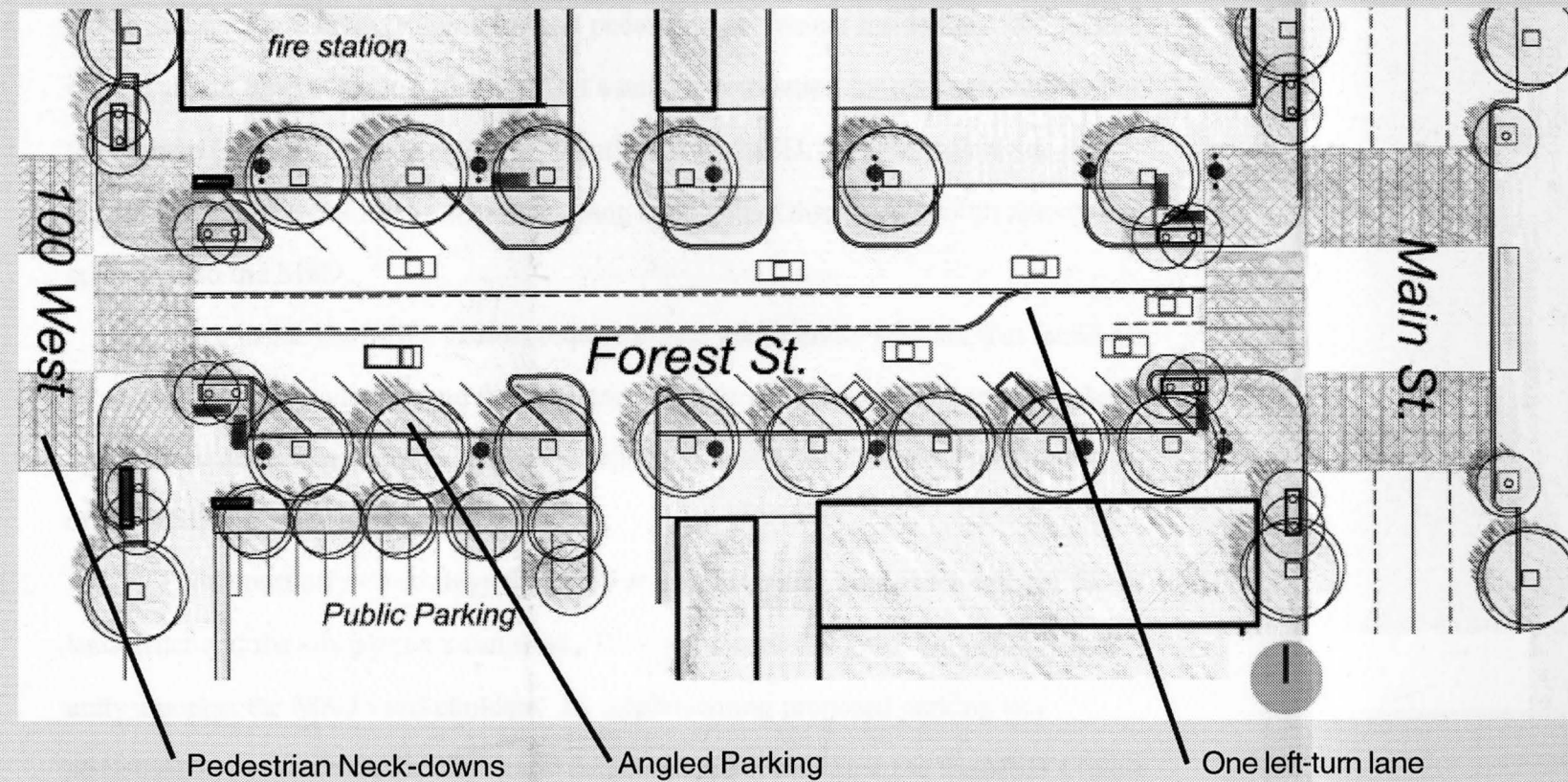
Current Firestation Driveway orientation



Proposed Firestation Driveway orientation



Proposed Forest Street Streetscape



District Entry Detail

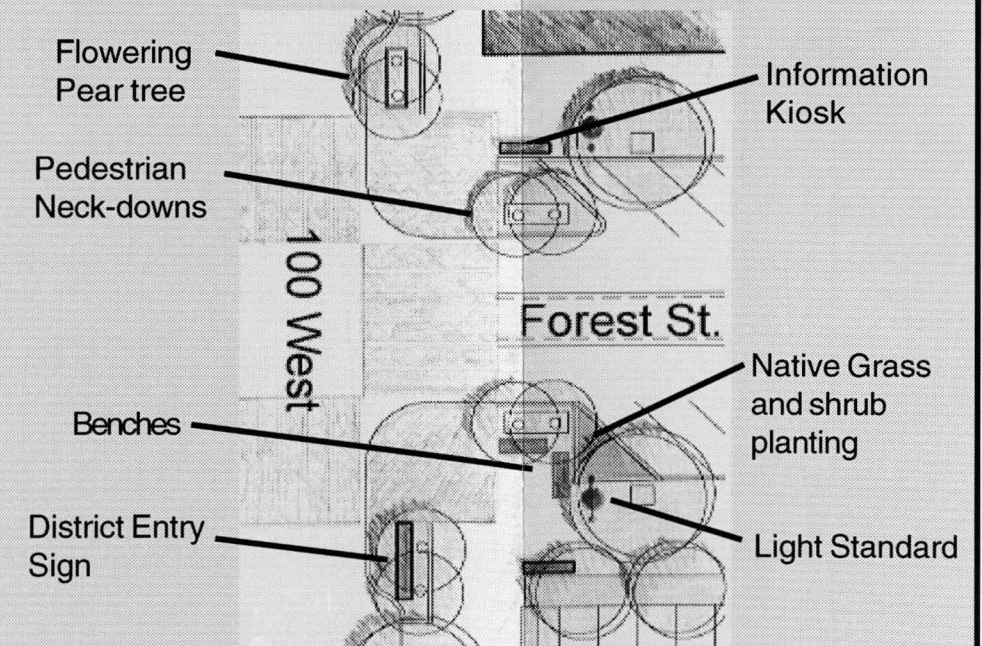


Figure 35. Forest Street's streetscape design.

CHAPTER 5

CONCLUSIONS

Throughout its brief history, Brigham City has dedicated a large amount of time, money, and planning into creating a vibrant and active MSD which has served as the community's town center. Since Brigham City's settlement, generations have continually recognized and reaffirmed this location by adding civic architecture, public spaces and improvements. Today this town center provides a vital and unique spirit for the community and should remain the social and commercial core of the community. The goal of this report is to assure this vitality into the future through a series of design and planning guidelines.

These design and planning suggestions recognize the unique character of the MSD, and facilitate future automotive and pedestrian movement inside the MSD. The historic urban form of these 6 blocks offers a unique destination for residents, and visitors to Brigham City. By creating a positive identity for the MSD, with identifiable design details, the commercial interests have a strong cooperative marketing tool to attract customers to the MSD.

Once inside the MSD, visitors require a clear and friendly network that facilitates movement of the automobile and the pedestrian. Failure to produce inviting networks for visitors will discourage return visits to the MSD, and hinder the future competitive clout of the MSD.

This report offers a strategy for physical improvement, from which individual landowner and the city planners can work. This framework can guide cooperation and unity amongst the MSD's stakeholders. By implementing proposed parking and pedestrian improvements, the city would demonstrate a commitment to the MSD's future pragmatic needs. This commitment by the city would instill confidence in the individual landowners to enhance their spaces. In doing so, the evolution of the MSD will be

assured a competitive and viable future.

The proposed guidelines and suggestions in this report are not intended to answer all of the problems that will arise in the numerous site-specific designs inside the MSD. However, by following these guidelines, each individually designed space will add to a positive identifiable MSD. Design details for individual spaces will require the input of individual landowners, shopkeepers, city services, and the city planning and building departments. These stakeholders should consider the guidelines of this report when they come to individual design decisions, as they are intended to structure the MSD as one place.

Areas of Further Study

Brigham City continues to add amenities for its citizens and visitors. In chapter III of this paper, several planning projects outside of the MSD were presented. Individually each project offers improvements to the community, however each project will have an influence on it's surroundings, and at times compete for visitors or consumers. Careful planning must be taken to assure that each projects properly blends into the context of the city. Careful consideration and planning must weigh the urban context, and competitive interests of the new and existing areas of the city.

Specific attention must be given to the following areas to ensure continued vitality of the MSD and to capitalize on opportunities to realize a greater Brigham City:

- Forest Street urban design / streetscape
- South Brigham City commercial district

Forest Street's zoning should consider the commercial saturation of the city. With the new interchange along I-15 there will be an increased exposure for commercial operations along Forest Street. By allowing too much commercial development along this stretch the city would be enabling additional "strip development" which the MSD is currently competing against at the south of town. Alternatives to over-commercialization

of this street should be explored through other studies and design charrettes.

The commercial district at the south end of Main Street also shows signs of change in the near future. With the redevelopment of the former Intermountain Indian School, the south Main Street commercial area will offer a convenient location for the residents of the new high density housing project. This commercial area should not be allowed to overdevelop and saturate the commercial needs of the city. The city needs to remain committed to retaining commercial vitality within the city's existing commercial district.

Brigham City is fortunate to have such a historically vibrant and significant MSD. The town center continues to remain significant to the community despite growing commercial competition elsewhere. Many cities and towns across the country are striving to revitalize and even create a core that is as strong, vibrant, and historically significant. It is the cities past leaders, landowners, and visionaries that have developed this core, and it is up to the city current leaders and landowners to retain the integrity of Brigham City's Main Street.

References

- Alexander, Christopher. 1979. *The Timeless Way of Building*. New York: Oxford University Press.
- Bradford, Kathleen. 1995. *Brigham City Historic Tour*. Brigham City, Utah: Brigham City Museum Gallery.
- Bradford, Kathleen. 1998. *Brigham City*. Internet WWW page at URL < <http://www.eddy.media.utah.edu/medsol/UCME/b/BRIGHAM,CITY.HTML> >
- Brigham City, Utah. 1988. *Comprehensive Master Plan*.
- Calthorpe, Peter. 1993. *The Next American Metropolis*. New York: Princeton Architectural Press.
- Davies, Stephen. 1982. *Designing Effective Pedestrian Improvements in Business Districts*. By the Project for Public Spaces, Inc. Chicago: American Planning Association.
- Douglas, Larry. 1998. Interview by author. 13 April.
- Ehrenhalt, Alan. 1997. "The Asphalt Rebellion." *Governing* 11(1):20-26(October).
- Forsgren, Lydia Walker. 1937. *History of Box Elder County, 1851-1937*. Brigham City, Utah: Box Elder County Daughters of Utah Pioneers.
- Francaviglia, Richard V. 1996. *Main Street Revisited*. Iowa City: University of Iowa Press.
- Jackson, John Brinckerhoff. 1970. *Landscapes*. Edited by Ervin H. Zube. Amherst: University of Massachusetts Press.
- Jacobs, Alan B. 1993. *Great Street*. Cambridge: M.I.T. Press.
- Larson, Paul. 1998. Interview by author. 13 April.
- Land Design. 1978. *Ogden 24th Street Plan*. City of Ogden, UT.
- Lynch, Kevin. 1964. *Image of the City*. Cambridge: M.I.T. Press.
- National Main Street Center. 1998. "What is the Main Street Approach to Downtown Revitalization?" Internet WWW page at URL <http://www.mainst.org/about/approach.htm>.

Oliver, Bim. 1998. Interview by Author. February 1.

Sakal, Rich. 1988. "Brigham City, A Town Where Main Street Still Is." *Salt Lake Tribune*. 3 March.

Thompson, J. William. 1996. "Let that Soak In." *Landscape Architecture*. November 1996

U.S. Department of Transportation. Bureau of Transportation Statistics. 1980. *Transportation Planning for Your Community: Traffic Planning*. Prepared by COMIS Corp. and Highway Users Federation for Safety and Mobility. Washington, D.C.

U.S. Department of Transportation. Federal Highway Administration. 1977. *Flexibility in Highway Design*. Washington, D.C.

Unterman, Richard. 1991. Taming the Automobile. *Planners Web: Planning Commissioners Journal*. Issue 1(November/December). Internet WWW page at URL <http://www.webcom.com/pcj/articles/unt002.html>.

Wetherall, Donald and Irene Kmet. 1995. *Town Life*. Edmonton: University of Alberta Press.