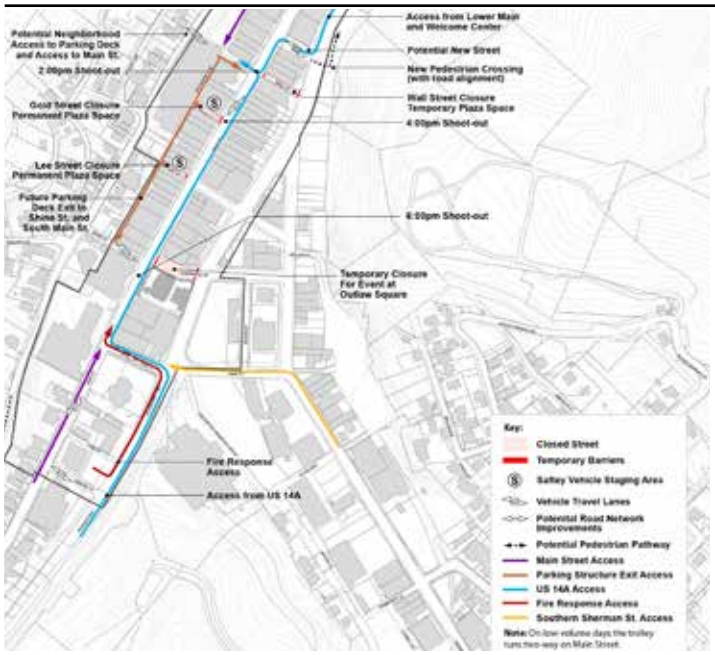
1876
DEADWOOD
SOUTH DAKOTA



MAIN STREET MASTER PLAN

December 2021


DEADWOOD, S.D. MAIN ST.

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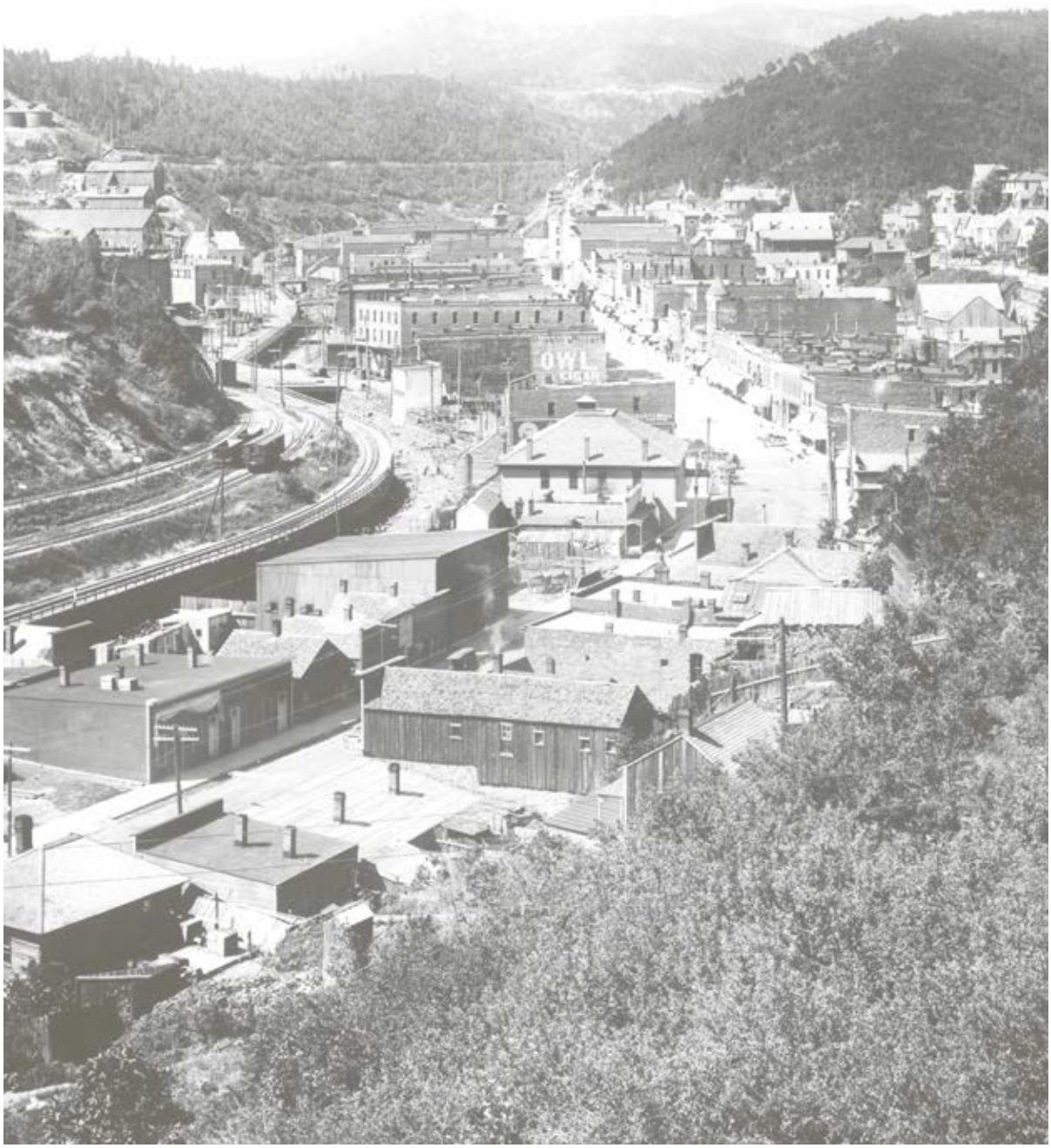


CHAPTER 1

INTRODUCTION

Main Street is a focal point of activity for the Deadwood community and the region. It thrives with a variety of businesses and events and attracts a wide range of people, including residents, business owners and up to 2,000,000 visitors. This all occurs in a dramatic gulch rich with historic and cultural resources. While Main Street is highly successful, Deadwood's citizens recognize it is important to manage downtown to assure its continued viability and to do so in a manner that is coordinated and efficient. They also recognize the importance of preserving its cultural resources. This plan sets forth a vision for Main Street that seeks to enhance its viability and protect its history; it then frames a series of actions to implement that vision.

The historic context

A place for special events

Outlaw Square, a recent improvement project

Reasons For The Main Street Plan

The Main Street Plan builds on policies set forth in the City's Comprehensive Plan that promote the continued success of Main Street as a heart of economic activity as well as a cultural center for the community. Other recent studies recognize the success of programmed events on Main Street and the need to better accommodate the large numbers of people that are drawn to Deadwood; the plan addresses this issue.

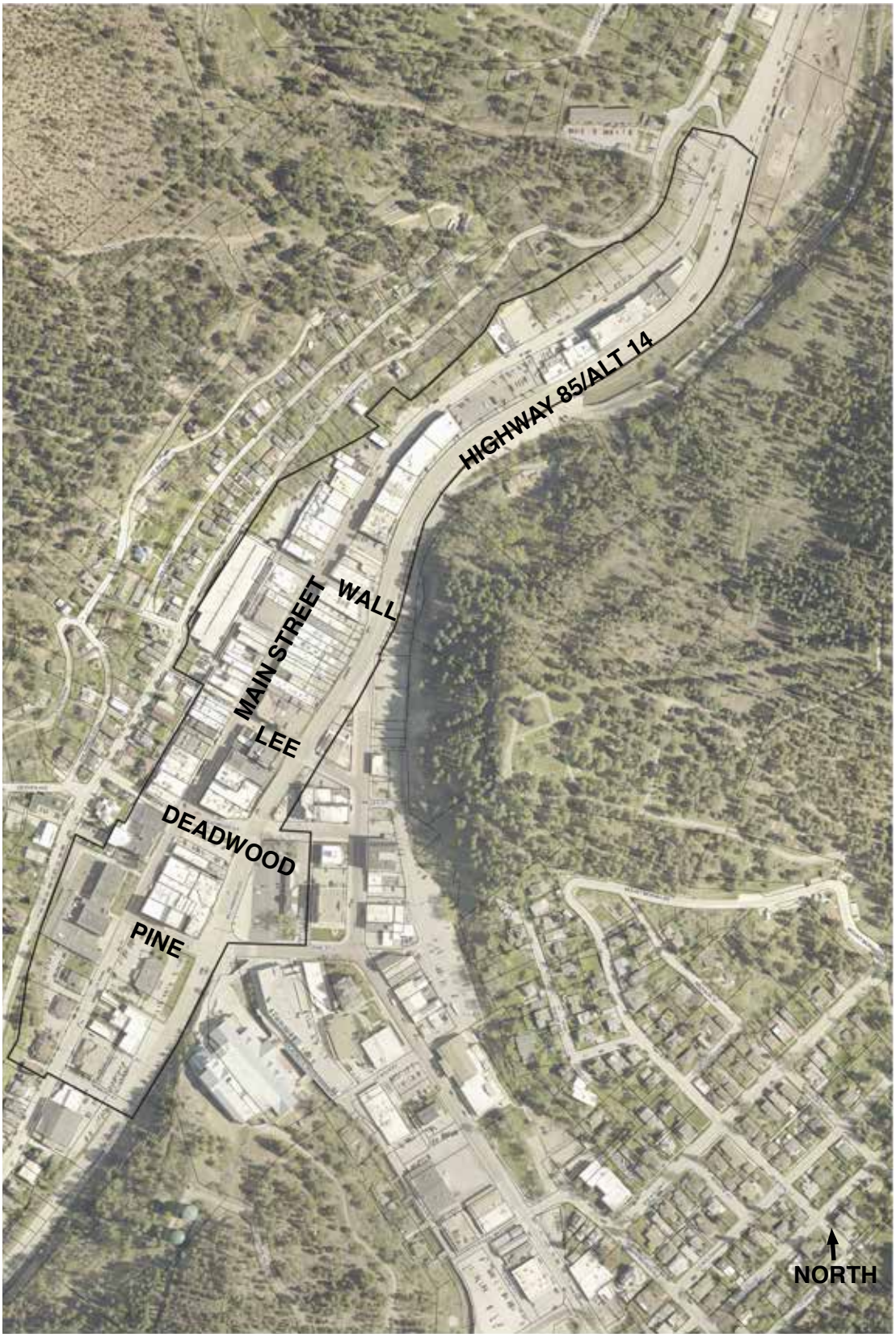
In recent years, several individual improvement projects were executed that relate to the broader context of Main Street and downtown at large. The improvement of the parking lot at the entrance to Lower Main and the construction of the Welcome Center there were responses to better managing circulation and access to Main Street; the erection of the gateway structure nearby also was related to enhancing identity. The construction of Outlaw Square occurred in response to the need for more outdoor event spaces in the area and demonstrated that public gathering space is adaptable to a variety of uses and seasonal changes. Each of these actions underscored the benefits of a coordinated plan for Main Street. In 2020, in anticipation of the direction that a plan would provide, the City Commission and Historic Preservation Commission discussed the issuance of Historic Preservation bonds to fund improvements along Main Street. This plan provides a starting point for more detailed design work that will occur as a part of that bond issue.

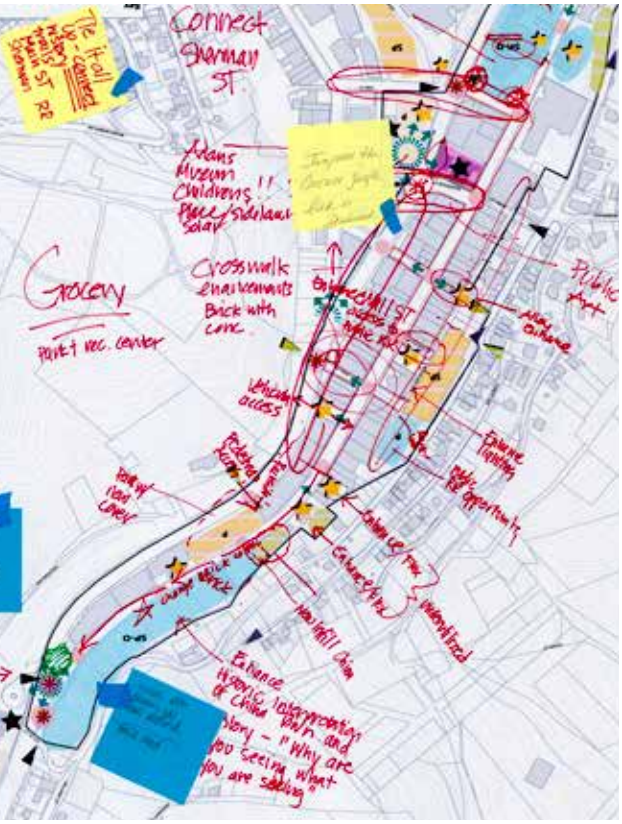
Deteriorated paving

Another impetus for the plan came with the construction of Outlaw Square during which significant deterioration in some underground utility systems was discovered. Since infrastructure improvements are anticipated, this provides an opportunity to also address other public realm improvements at the same time. This includes replacement of brick pavers, restoration of some historic streetscape features, utility updates, and improvements that will enhance the experience of Main Street for all.

Map #1: Deadwood Main Street Master Plan Study Area provides an overview of the study area identified within this document. This plan can be used in establishing use of materials and treatments with the balance of the commercial area of Deadwood such as Sherman Street.

Map #1: Deadwood Main Street Master Plan Study Area





Workshop participants crafted plan concepts on maps of the area and rated images of potential improvements.

Finally, The South Dakota Department of Transportation, in collaboration with the City of Deadwood, is in the process of a corridor study for U.S. 14A/U.S. 85 and the Deadwood box culvert that lies adjacent to Main Street. The project provides the opportunity to enhance the highway edge and improve parking and access. Coordinating this work with other planning for Main Street therefore is a reason for the plan.

How The Plan Will Be Used

The Main Street Plan is a policy document that provides general direction for a variety of improvements. As such, city officials and commissions will use the document when setting priorities for individual improvement projects. It also will serve as a means of communicating the community's aspirations for Main Street to other governmental agencies at the state and federal levels.

Scope Of The Main Street Plan

The plan focuses on the Main Street corridor, generally from the street's intersection with Highway 14A/85 and Lower Main to the intersection with Armory Street. It also considers how the corridor relates to adjacent facilities, including some cross streets, trails and public institutions. The plan focuses on the physical aspects of the public realm while considering how those components support downtown's social, cultural and economic activities. The plan describes existing conditions of the various components that make up Main Street, including the street itself, its sidewalks and the street furnishings which are located throughout the area. It also describes conditions of utility and circulation systems. It then provides recommendations for improvements to each of those components. It concludes with a strategy for implementing the recommendations.

The Planning Process

The City of Deadwood and Deadwood Historic Preservation sponsored the development of this plan. The planning team included members of the community, city commissions, staff and professionals in planning, architecture and engineering. Insights also were provided by representatives of the National Park Service and the South Dakota State Historic Preservation Office.

The effort began with an assessment of existing conditions, which was published as a separate Existing Conditions Report; key findings from that are summarized in this plan. Published in 2019, the existing conditions report is also available through the city's web site.

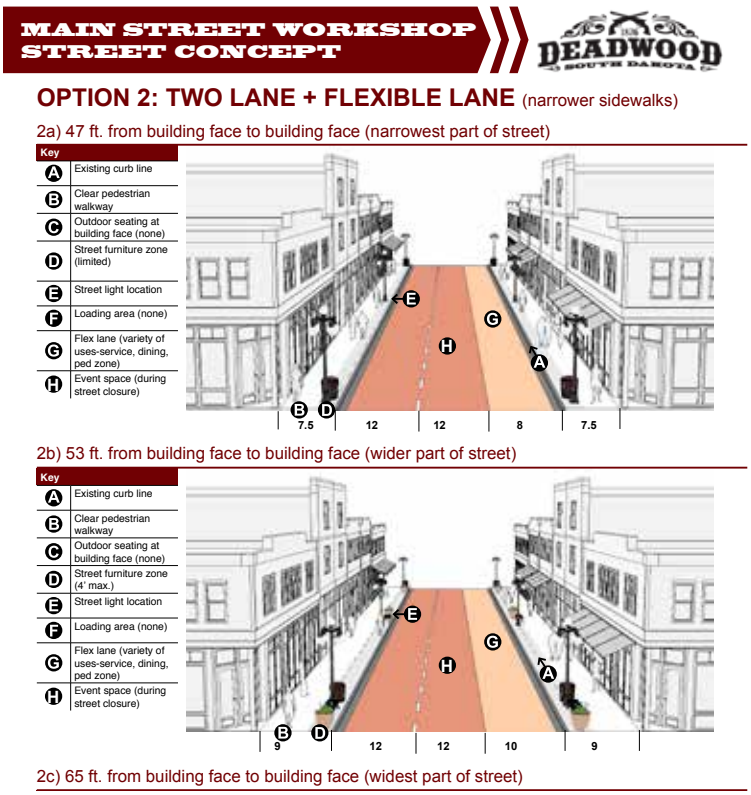
Public Outreach & Other Meetings

The City of Deadwood embraces open communication and interaction amongst community members and acknowledges that when everyone works together toward a common goal, positive and proactive planning can occur.

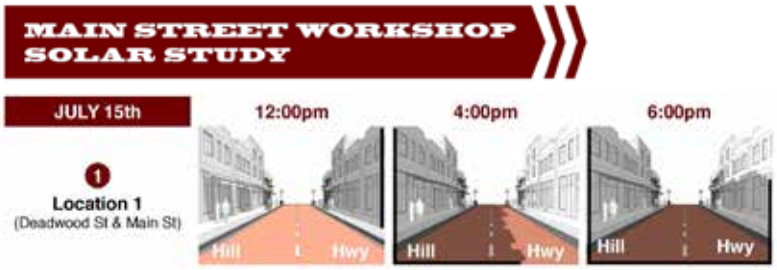
Following the technical analysis of existing conditions, community members participated in a series of workshops, focus group meetings and team study sessions to generate plan concepts. This community input was a key part of the process. In a design workshop, which was held in January 2020, participants drafted their vision for Main Street. They then identified key issues, goals and objectives for action. Information from previous planning efforts, infrastructure investigations, interviews, and on-site observations from the team also informed the plan recommendations.

In a public workshop, teams worked on policies for a range of planning topics.

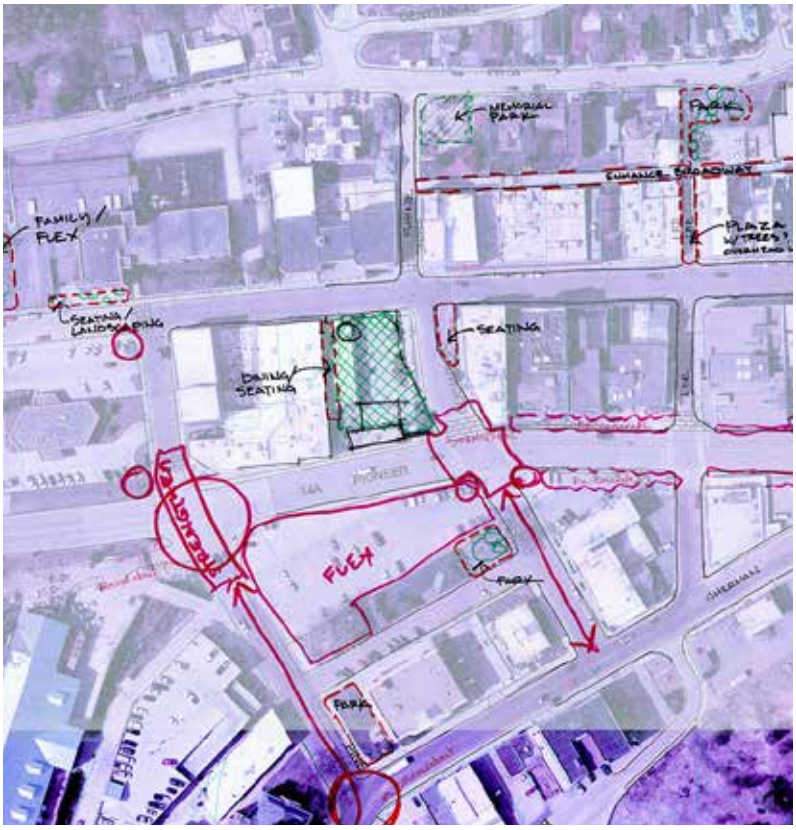
A team at the January 2020 workshop



Workshop participants reviewed a series of images depicting alternative ideas for improving Main Street itself. These two examples illustrated the concept of a flexible-use lane at places of different street widths.



Shade studies helped inform discussions of alternative street designs.



Workshop participants considered connections from Main Street to the Visitor Center and Sherman Street.

CHAPTER 2

THE HISTORIC SIGNIFICANCE OF MAIN STREET

It is important to understand the history of Main Street, in terms of how it has achieved historic significance, the degree to which it has changed and the ways in which it has served many functions over time. This section presents an overview of Main Street's history, focusing on its infrastructure, to place the planning concepts into context. It includes a Time Line summarizing some key events to illustrate the nature of evolution and change of this historic resource. It next explains the importance of Deadwood's status as a National Historic Landmark and how this relates to policies for improving Main Street. It then identifies some of the surviving key, character-defining features that should be preserved.

Themes Of Development In Main Street's History

Main Street has never been static. It always has been alive with activity, with many of its components appearing and changing over time. These are basic themes of the street's history to consider:

- Main Street has been, and remains, a dynamic Place.
  - It has always been lively and a center of activity.
- Evolution and change are part of its heritage.
  - Changes have occurred in paving materials for travel lanes and sidewalks, various streetlights have been installed over time and a range of furnishings have come and gone.
- Main Street has been adaptable, accommodating different uses.
  - It has supported commerce, public gatherings and entertainment as well as some residential uses.
- The street itself has been an armature for utilities (above and below ground).
  - Overhead power lines have come and gone and a network of underground utilities has grown over time.

Main Street has been, and remains, a dynamic Place. It has always been lively and a center of activity.

Main Street has been adaptable, accommodating different uses.

Main Street has always been a corridor for movement of people in a variety of ways.

- Main Street has always been a corridor for movement of people in a variety of ways.
  - This includes people on foot and in various types of conveyances including horses, autos and trolleys.
- It has always been a place for celebrations and community gatherings.
  - Parades, festivals, exhibitions and rallies are ongoing traditions that bring with them decorations, special structures and programmed activities.

Chronology Of The Evolution Of The Street

This section summarizes the history of Main Street in a series of categories which reflect different components that make up the street. A graphic time line then follows, which places these events into a general chronology.

Street and sidewalk design

1876- 1877: The edge of Main Street is defined only by buildings (no curb or sidewalks).

1877-1879: Lots on Main Street are platted, which more clearly defines the street alignment.

1877 to 1879: A uniform line of wooden boardwalks is constructed in the core.

1886: The core of Main Street is paved in macadam. A sewer line, manholes and sandstone curb and gutter are also part of the project.

1888: The Deadwood Street Railway, a horse drawn trolley system, is incorporated. Photographs show the rails embedded in the middle of the street.

1904-1905: Main Street is widened. Concrete replaces wooden sidewalks in the core, and are installed south of the school and in Lower Main.

1907: Brick streets replace macadam paving.

1948: Parking meters are installed in the downtown core.

1950s: Asphalt paving is installed over brick in the core of Main Street.

1964-67: DOT builds a new highway parallel to Main Street to relieve traffic pressure (including a box culvert).

1991-1992: New brick paving is installed in the core, similar to the historic design. Parking meters are removed in the core as well.

Historic night view

Early autos, 1920s

Parked cars

1902 (Deadwood History Inc.)

Utilities (sewer, water, electricity, etc.)

December 1, 1876: The first telegraph line is established in Deadwood.

March 9, 1878: The first telephone lines are installed.

March 1, 1881: An Act to Incorporate the City of Deadwood provides the foundation for future work in way of street improvements, utilities, sanitation, and maintenance.

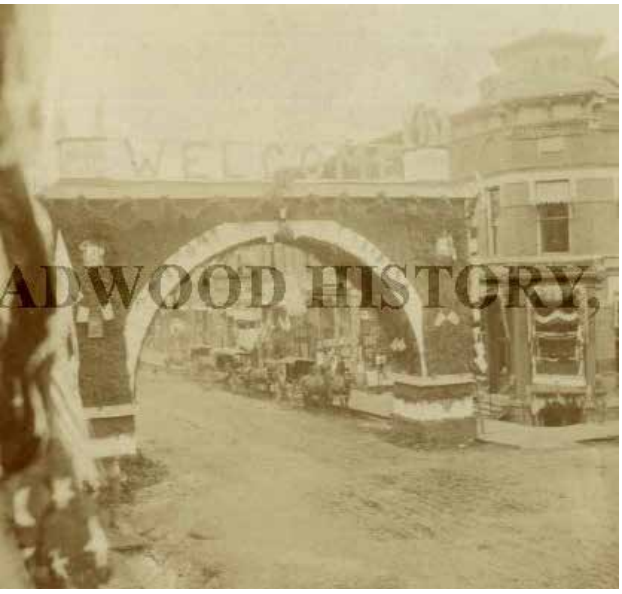
1902: Underground gas lines are installed.

1903: Water service is extended to Upper Main Street

1904: Sewer lines are extended to Upper Main Street.

1907: Concrete curb and gutter is installed.

2002: Overhead utility lines are removed in the core of Main Street.



1900 (Deadwood History Inc.)

Street lighting

1909: String lights strung overhead across Main Street appear in photos taken by Wyoming photographer J.H. Stimson.

1912: Lights on metal poles are installed. These are a five-globe design on short, dark poles.

1974: Photos show cobra-head lights on Main Street.

1994: Historic replica lights on metal poles are installed.

Big events and other facts

1874: Gold is discovered in the Black Hills.

1876: Wild Bill Hickok is killed by Crooked Nose Jack McCall on August 2.

1877: Chinatown develops along Lower Main.

1879: Fire destroys the business section of Deadwood – burning 300 buildings on September 26.

1880: The City of Deadwood is incorporated; the census population is 10,000.

1883: Flood destroys 150 buildings and kills 3 people in May.

1889: South Dakota Statehood established November 2.

1893: Nationwide Panic of 1893

1894: Two downtown blocks in the commercial area are destroyed by fire.

1902: Electric trolley line opens between Deadwood and Lead.

1924: The “Days of 76” event begins.

1938: The first Sturgis Rally occurs.

1942: The Homestake Gold Mine shuts down during WWII.

1961: Deadwood is designated a National Historic Landmark on July 4.

1989: Deadwood institutes legalized, limited gaming with proceeds dedicated to preserving Deadwood’s heritage.

1989: The Secretary of the Interior establishes the Period of Significance for the National Historic Landmark to be 1875-1936.

Historic street view (Stemin)

Graphic Time Line For Main Street

The history of Main Street is presented in a graphic time line in the pages that follow. It organizes events into the same four thematic categories seen above.

MAIN STREET TIME LINE

1870s - 1877
The early street edge is defined by buildings only.

1877-1879
Lots on Main Street are platted, which defines the street.

1877-1879
A uniform line of wooden boardwalks is constructed in the core.

March 9, 1878
First telephone lines are installed.

December 1, 1876
First telegraph line is established.

1870 1875 1880

1874
Gold is discovered in the Black Hills.

August 2, 1876
Wild Bill Hickok is killed by Crooked Nose Jack McCall.

1877
Chinatown develops along Lower Main.

September 26, 1879
Fire destroys entire business section of Deadwood – burning 300 buildings and leaving 3,000 people homeless.

Street & Sidewalk | Utilities | Street Lighting | Big Events & Other Facts

1886
The core of Main Street is paved in macadam.
A sewer line and manholes are also part of the project.
Sandstone curb & gutter is added in as well.

1880
City of Deadwood is incorporated; census population is 10,000.

May 1883
Flood destroys 150 buildings and kills 3 people.

1888
The Deadwood Street Railway, a horse drawn trolley system, is incorporated. Photographs show the rails embedded in the middle of the street.

1880 1885 1890

March 1, 1881
An Act to Incorporate the City of Deadwood Dakota Territory provides the foundation for future work in way of street improvements, utilities, sanitation, and maintenance.

May 25, 1886
City Council accepts Thomas Jones proposal to install underground sewer lines, a storm sewer system and manholes, in addition to the Main Street macadam paving project.

Nov. 2, 1889
South Dakota Statehood established.

Street & Sidewalk | Utilities | Street Lighting | Big Events & Other Facts

1902
Underground gas lines are installed.

1903
Water service is extended to Upper Main Street.

1904
Sewer lines are extended to Upper Main Street.

1904
Concrete replaces wooden sidewalks in the core of Main Street.

1904-1905
Street is widened and concrete sidewalks are installed south of the school and in Lower Main.

1893
Nationwide Panic of 1893

1890 1900 1910

1894
Two downtown blocks in the commercial area are destroyed by fire.

1902
Electric trolley line opens between Deadwood and Lead.

1907
Concrete curb and gutter is installed.

1909
String lights strung across Main Street appear in photos taken by Wyoming photographer J.H. Stimson.

1920s

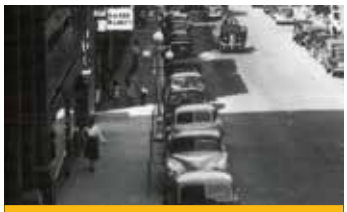
Main Street is paved in brick.

1910 1920 1930

1912

Lights on metal poles are installed. These are a five globe design on short, dark poles.

Street & Sidewalk **Utilities** **Street Lighting** **Big Events & Other Facts**



1948
Parking meters are installed in the downtown core.

1930 1940 1950

1938
The first Sturgis Rally occurs.

1942
Homestake Gold Mine shuts down during WWII.

1950s

Asphalt paving is installed over brick in the core of Main Street.

1964-1967

DOT builds new highway parallel to Main Street to relieve traffic pressure (including a box culvert).

1950 1960 1970

July 4, 1961

Deadwood is designated a National Historic Landmark.

Street & Sidewalk | Utilities | Street Lighting | Big Events & Other Facts

1974
Photo shows Cobra head lights on Main Street.

1989
The Secretary of the Interior establishes the Period of Significance for the National Historic Landmark to be 1875-1936.

1970 1980 1990

May 4, 1980
Brothels closed.

1987
Deadwood's Historic Preservation Commission is established.

1989
Deadwood institutes legalized, limited gaming with proceeds dedicated to preserving Deadwood's heritage.

1991-1992
New brick paving is installed in the core, similar to historic design.
Parking meters are removed in the core

1998
Days of '76 Rodeo is named the Best Small Rodeo of the Year (more awards follow.)

2000
Historic Adams House opens as a museum.

1990 2000 2010

1994
Historic replica lights on metal poles are installed.

2002
Overhead utility lines are removed in the core of Main.

2002
The last gold mine, operated by Homestake, shuts down.

2004
HBO premieres its Deadwood series.

2005
Live concert on Main Street, starring Big & Rich draws 50,000 people.

Street & Sidewalk | Utilities | Street Lighting | Big Events & Other Facts

2019
Outlaw Square opens.

2014
True West magazine names Historic Deadwood the Best Town for Historical Entertainment.

2010 2020 2030

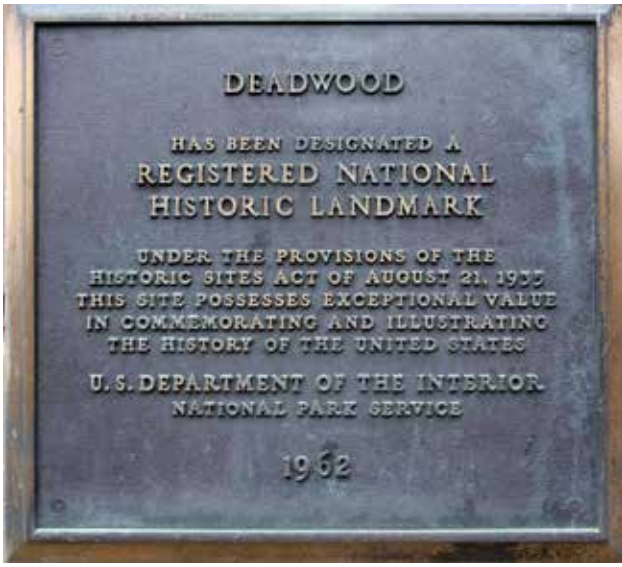
2017
New wayfinding signs are installed.

2020
COVID-19 Pandemic

2020
Removable bollards (posts) are used for circulation control during special events.

2017
Welcome Center at Lower Main opens.

The Deadwood National Historic Landmark



The historic City of Deadwood is a registered National Historic Landmark. National Historic landmarks (NHLs) are historic properties that illustrate the heritage of the United States. Each NHL represents an outstanding aspect of American history and culture. As such, NHL designation is the highest level of recognition for historic significance awarded by the Secretary of the Interior. Only 2,600 NHLs are found in the U.S. today. These include historic buildings, sites, structures, objects and districts. In 2021, sixteen NHLs were in South Dakota. NHLs are listed in the National Register of Historic Places, along with a large number of resources that don't qualify for listing as an NHL but do meet criteria for the National Register.

The National Historic Landmark (NHL) designation of the City of Deadwood focuses on the boomtown created in 1875 during the Black Hills gold rush, with a period of significance between 1875 and 1936. This time frame celebrates the role of Deadwood as the last rich strike of precious metal on the mining frontier, and the characters that resided there including Wild Bill Hickok, Calamity Jane, Deadwood Dick and Poker Alice. Note that the National Register listing has an expanded period of significance, that is: 1876-1939.

Basic Preservation Principles And How They Apply To Main Street

South Dakota state law requires that any local governmental entity, including Deadwood, must give the State Historic Preservation Officer (SHPO) opportunity to consider the impacts of work that may encroach upon, damage, or destroy any historic property that is listed in the National Register of Historic Places. In doing so, the SHPO uses the Secretary of the Interior's Standards for Preservation of Historic Properties. These standards apply to a wide range of properties. Some states have provided more specific guidance for how these standards may apply to historic downtown streets. A discussion of the guidance provided by other states and related guidelines for treatment of improvements to Main Street in Deadwood is included as Appendix C to this plan. The key principles that are the foundation for that guidance are these:

Historic vault cover, as seen from above

Historic vault cover, as seen from below

Principle 1

Preserve the key character-defining features of the street that convey its historic significance.

Principle 2

When introducing new features, do so in a way that is compatible with the historic character. Use replicas when documentation is available. Otherwise, use high quality contemporary designs for new elements that complement the historic setting without detracting from it.

Principle 3

Preserve the role of Main Street as a gathering place for the community.

Principle 4

Recognize that evolution and change are a part of Main Street's history.

Principle 5

Continue the story-telling role that Main Street plays in conveying the heritage of the community and its importance as a National Historic Landmark.

The Key, Character-Defining Features Of Main Street

As a part of planning for improvement along Main Street, it is important to preserve the key character-defining features that contribute to its historic significance. These are:

Actual historic features surviving from the Period of Significance

- Rock retaining walls at the southern end of Main Street
- Metal vault covers in sidewalks
- Basement entries with metal hand rails
- Bulkheads with bulls-eye glass
- Metal storm water inlets
- The alignment of the curbs

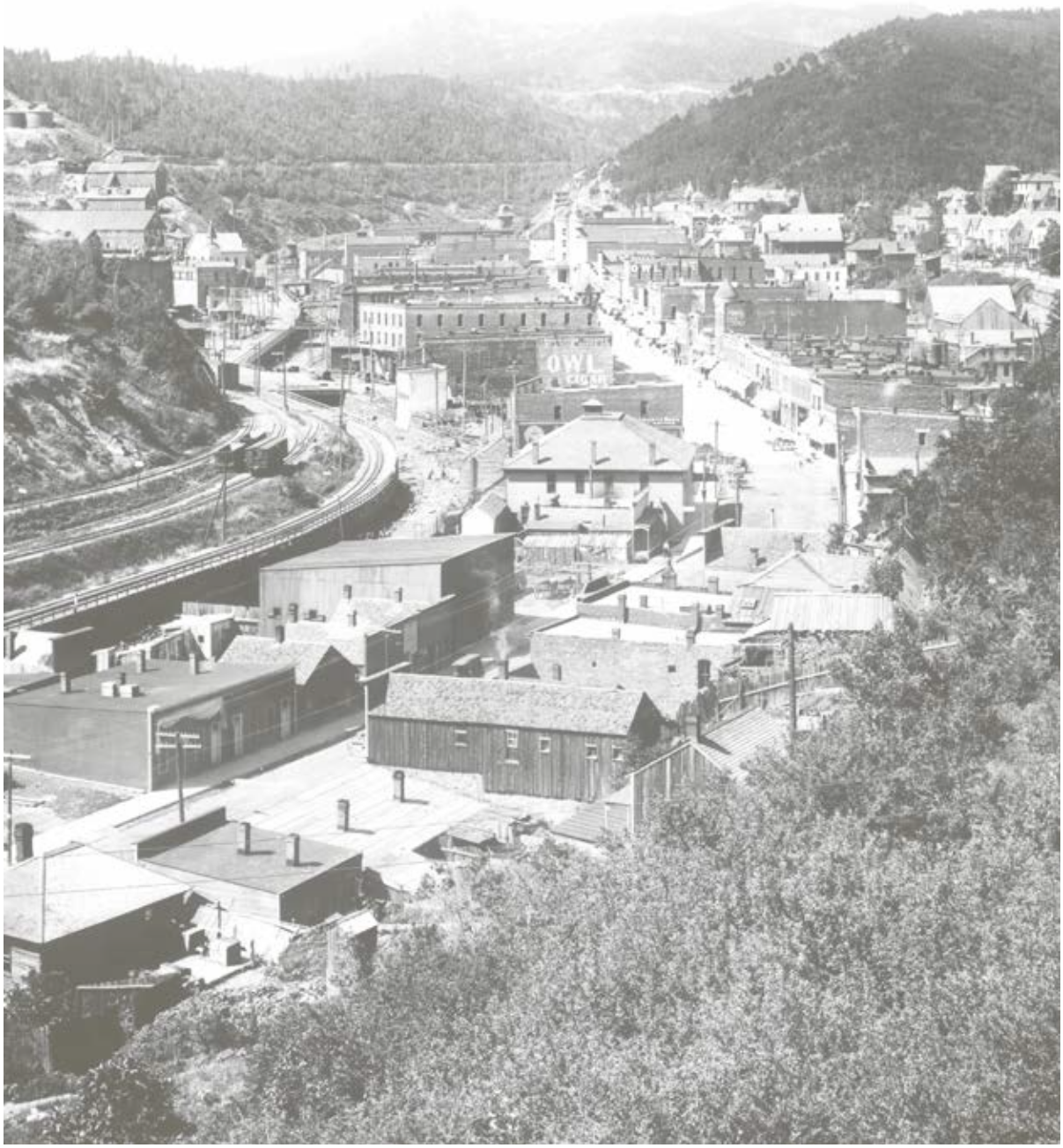
Replicated features that reflect earlier designs

In addition, some features exist that are in keeping with the historic character, but are more recent additions. These do not require preservation, but may merit reuse or reinterpretation. These are:

- Multi-globe replica street lights
- Brick street paving
- Concrete sidewalks
- Concrete curb and gutter

Original manhole cover

Replica street lights



CHAPTER 3
THE LIVING STREET

Planning For Changing Use Patterns

Deadwood's Main Street is dynamic, changing in the way it is used and by the participants involved by the hour, as well as by the day of the week, and as seasons change. This section describes how the street is used today and forecasts potential activity patterns for the future. These are important factors in designing the street to accommodate the variety of uses, activities and events that occur there.

Stagecoach rides

Main Street's players

Visitors to Deadwood are, of course, a key segment of the population that activates Main Street. These include history buffs coming to experience its Old West setting, those who attend special events, and others who enjoy gaming and other destination businesses. Business and property owners also work on the street daily and city residents interact with Main Street, for dining and some basic services and also to join in special celebrations. Each of these groups may use the street in different ways, which is an important factor in planning for improvements.

Designing for different needs

Main Street should provide flexibility in its design, to accommodate the range of uses that include events while also meeting basic service requirements. These are some factors to consider:

Skating at Outlaw Square

• **Planning for visitors**

Deadwood is a mecca for a variety of events. Some are well established and draw an international crowd, others are in their beginnings, and others have yet to be created. There is opportunity to host a range of events for a variety of audiences. Some of these may have some crossover, while others may focus on a particular theme. In any case, each event brings an abundance of energy and vitality to the area. Main Street should be an inviting place for all of the events it hosts, while accommodating normal use during non-event times.

Events at Outlaw Square

Holiday celebrations

• Planning for every-day needs
Main Street must accommodate basic service operations, including delivery trucks, emergency vehicles and public transportation. These needs continue throughout the year, although they also may have cycles of peak use and lower levels of activity.

• Planning for changing circulation patterns
Main Street must accommodate a variety of circulation modes and changes in their levels of use. The cyclical nature of Main Street means that there are days in which traffic volumes are low, and others where volumes are quite high. There are times when portions of the street are closed to vehicular traffic for special events, such as a “shoot out,” a concert, a race or a crafts fair. This means that vehicular circulation patterns must change from that of a low-volume use day. These patterns may be different for special transportation modes, such as trolleys and stagecoaches, as opposed to private vehicles.

• Anticipating trends in street activities
More recent trends nationally in active Main Streets should be considered because new uses may be inspired by them. Ideally, the street will be designed to provide opportunities for them.

An example of emerging uses is interest in creating outdoor dining areas. In keeping with the old west theme, areas that have a water source and utilities could be turned into outdoor cafes or saloons. Small high-top tables and chairs that would also accommodate umbrellas for shade could be used in alleys or short blocks of historic streets. Food fare and drinks could be provided from existing restaurants or possibly from food trucks. These could be open in high season independently or concurrent with events.

Buskers and other street performers also are very popular in many cities. Most do not need utilities so they can perform anywhere and add excitement to the Main Street experience. Managing them could fall to the convention and visitor’s bureau to ensure that they aren’t competing with existing events.

Pop-up stores also are a successful trend in many cities. In some instances, one entity holds the master lease and

provides insurance so that the visiting artisans do not have to. This lease could be managed by the city or by the convention and visitor's bureau so that there is continuity with upcoming events or construction. Artisans would then be able to negotiate rent and utilities with just one entity.

With some of the newly identified venues, there are opportunities for children's programming as well as acoustic performances. Some cities work with their schools to develop programming and babysitting options as well.

Re-enactment on Main Street at Outlaw Square

Assessment Of Existing Visitor Use Patterns On Main Street

With the overview of the cyclical use patterns of Main Street in general, it is important to understand how the street functions today, from the user's perspective. This section provides an assessment of current conditions and outlines some opportunities for improvements. This information was collected during workshops and individual interviews.

Overall use patterns

Issues:

- Some visitors are intimidated by events that draw the more boisterous crowds.
- The Welcome Center is underutilized during the low season.
- Many outdoor spaces along Main Street are underutilized and need to be enhanced.
- Need flexibility in outdoor spaces to accommodate a variety of events.
- More retail is needed during off-season to activate the spaces that are associated with businesses and gaming establishments.

Recommendations:

- Promote more family events.
- Promote a family type event that incorporates motorcycles, such as a patriot guard parade.
- Pop-up retail stores and similar vendors have been very successful around the country and could be considered to assist in activating spaces. Use these spaces to provide retail not found at the brick and mortar shops.

The Trolley on Main Street

- Outdoor spaces could be improved as seating, interpretive, and dining areas.
- Develop a series of flexible, coordinated and programmed plazas and public spaces along Main Street.
- Distribute special site amenities and features along the Main Street corridor to activate a series of spaces. This may include:
  - Reconstructed historic features (water feature, pergola)
  - Historic resources (ore cart, rails, etc.)
  - Interpretive panels
  - Fixed and temporary stages

Functional aspects

Issues:

- Loading and unloading for events is a challenge, especially for larger vehicles.
- Additional, strategically placed, trash containers are needed during events.
- Sidewalks are too narrow for placing tents during events (typical tents are 10ft. x 10ft.).
- Very few electrical outlets are available, which limits event capabilities.
- The pedestrian way is constrained.
- Containers for recycling are needed.
- Need more public restrooms.

Recommendations:

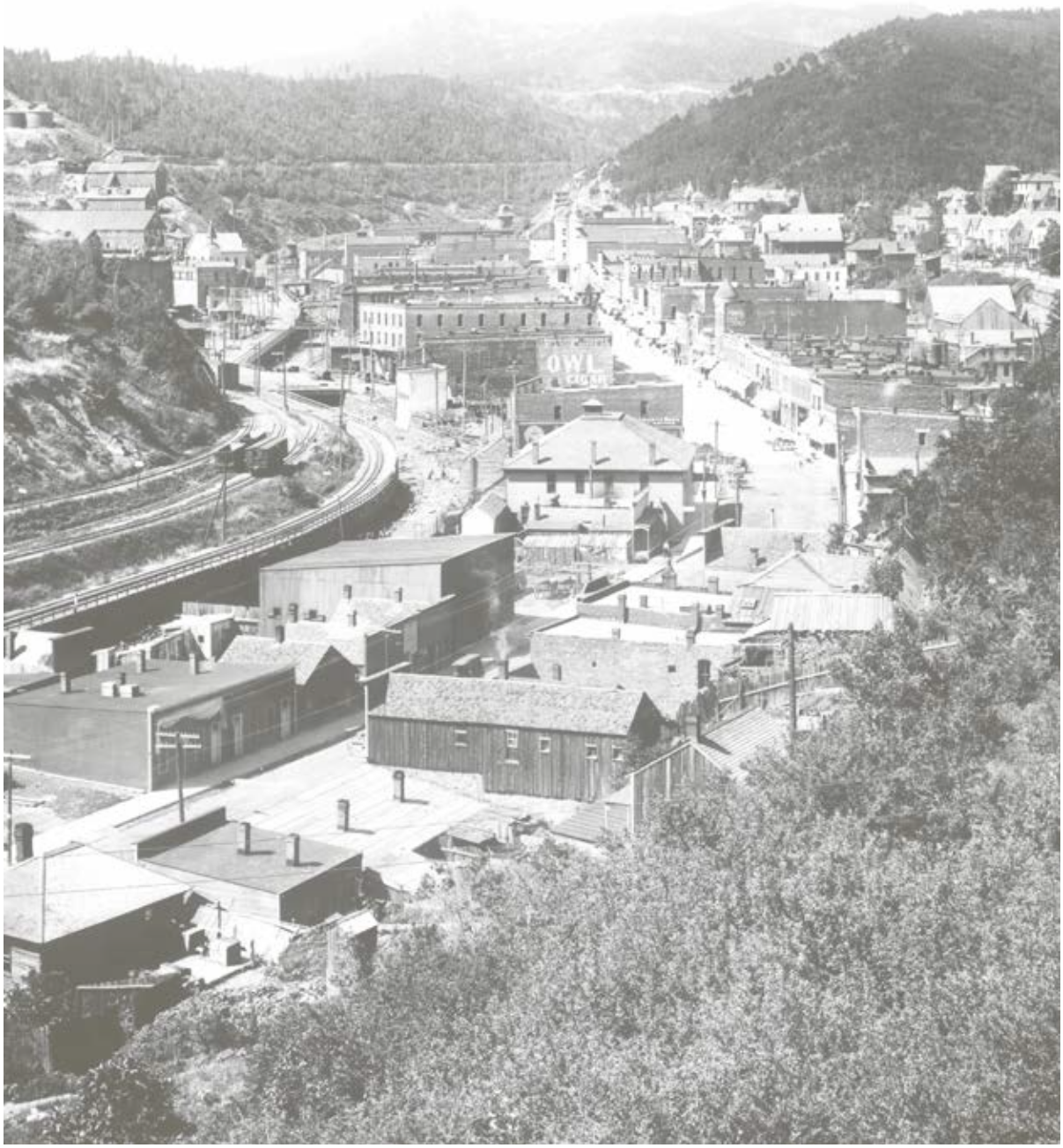
- Identify key vehicular loading and unloading locations for events along with strict times of enforcements.
- Develop a coordinated clean-up plan for events.
- Develop a map of open businesses during large events to help shoppers.
- Consider abbreviated open container areas.
- Consider identifying smoking areas with fans.
- Provide more electrical outlets to increase event capabilities. Also, provide electricity access within the street.
- Provide spaces for tents to orient openings toward Main Street businesses to enhance storefront dynamic.
- Identify refuse stations during events.
- Promote the use of recycled materials and appropriate disposal during all events.

The Vision For Main Street

Given an understanding of Main Street's historic significance, its functional requirements and how it is used, this is the vision for its future:

- Main Street continues to be the heart of the community.
- Main Street is lively, filled with businesses, activities and services for a wide range of users.
- Main Street is flexible in its design, accommodating a wide range of uses and responding to changing cycles of use.
- Main Street must continue to preserve its historic significance and conveys its heritage to the community.
- Main Street functions efficiently in terms of utilities, services and circulation.
- Main Street is safe and inviting.

Rally at Outlaw Square



CHAPTER 4

THE DESIGN FRAMEWORK FOR MAIN STREET

This chapter provides a design framework for Main Street that recognizes its history and coordinates urban design and circulation system improvements. This is presented in a series of three maps:

(1) A map of Character Areas that describes the features of three different planning areas

(2) An Existing Conditions map which identifies key features of the street, including the location of light poles, brick paving and certain public facilities

(3) A Design Framework map which identifies key pedestrian access points, outdoor spaces and other physical features that are to be coordinated. It includes key concepts and improvements related to vehicular systems, pedestrian systems, and outdoor public and private amenity spaces. More details about many of these systems are then described in more detail in subsequent chapters of this plan.

Map #2: The Character Areas

Deadwood's Main Street can be defined in three sub-areas. These are described here as "Character Areas," each with distinctive development patterns. Variables include topography or setting, land use, building placement, and streetscape improvements.

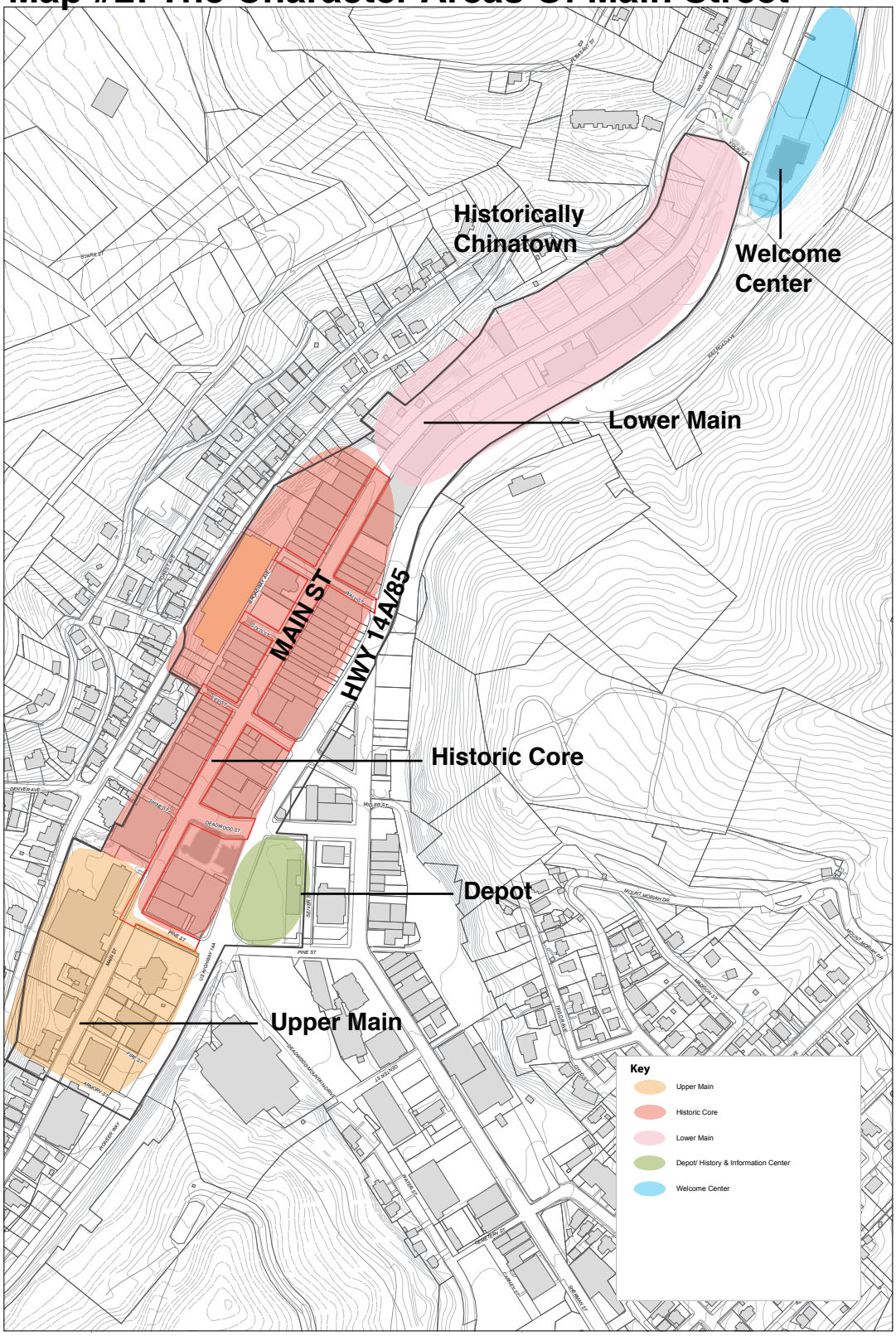
Historic Core: This is the heart of Main Street. It stretches from Pine Street on the southern end to the place where brick paving ends at the north end. An objective is to continue to preserve the historic character of this area while enhancing its function for the variety of uses that it experiences. Some of its key features:

- Dramatic views to the hillsides exist from many locations.
- It has the highest concentration of historic buildings along Main Street. These typically align at the back sidewalk edge.
- Most facades have storefront display windows.
- Buildings on the "west" side abut the hillside with a historic alley (Broadway) in between. The "east" side is more open and is bound by the state highway.

Historic Core - Main & Lee

Historic Core - 600 Block of Main Street

Map #2: The Character Areas Of Main Street



- A large parking garage is located off Broadway on the west side.
- The street is paved in brick, which evokes a historic design and follows the historic alignment.
- Curbs and sidewalks are concrete and follow the historic alignment.
- Streetlights (replicas of an historic character) are located near the curb and align along the street. They alternate position from one side to the other.
- Side streets run perpendicular to Main Street. They are relatively narrow and are paved in brick.
- Historic manholes and vault covers exist in the street and in the sidewalks.
- Basement access to a few buildings occurs along the sidewalk. These are protected with metal railings.
- A variety of directional and regulatory signs are located along the street.

Upper Main - 700 Block, west side

Upper Main: This is a shorter segment of Main Street and is a transition from the Historic Core to abutting residential neighborhoods. It extends from Armory Street on the southern end to Pine Street on the northern end. It includes a mix of historic buildings and more recent structures. The blocks on the east side continue through to the highway. An objective is to continue to provide a compatible transition to abutting neighborhoods while improving the sense of connection to and association with the Historic Core. Some key features:

- It is a gateway to the Historic Core, for those approaching from the south.
- Views to hillsides exist along the street.
- The development pattern in this area is varied, in terms of building setbacks.
- It includes historic institutional buildings such as the Lead and Deadwood Elementary School and St. Ambrose Catholic Church.
- A few historic residential buildings survive on the hillside and are located near the sidewalk edge.
- Some newer, commercial buildings face the highway side and have a variety of setbacks.
- Historic rock retaining walls define the sidewalk edge in front of the school.
- The street is concrete from Pine to the west.
- A variety of directional and regulatory signs are installed along the street.

Upper Main - 700 Block, east side

Upper Main - 700 Block, west side

East side of the 500 Block of Main Street

West side of the 500 Block of Main Street

- Newer, non-historic, streetlights are located near the curb on the hillside and telephone lines align along the opposite side of the street.
- The “west” side is up against the hillside, and the “east” side is bound by the highway.

Lower Main Street: This portion of Main Street was historically a very busy commercial area and included an area known as Chinatown. It extends from the intersection of Main with the highway on the northern end to the point where brick paving begins in the Historic Core. This area has undergone substantial change since that time. Few historic buildings remain. Several new, larger buildings house hotels and gaming establishments. An objective is to promote a distinct identity for this Character Area while also strengthening its association with the Historic Core. Key features of this character area include:

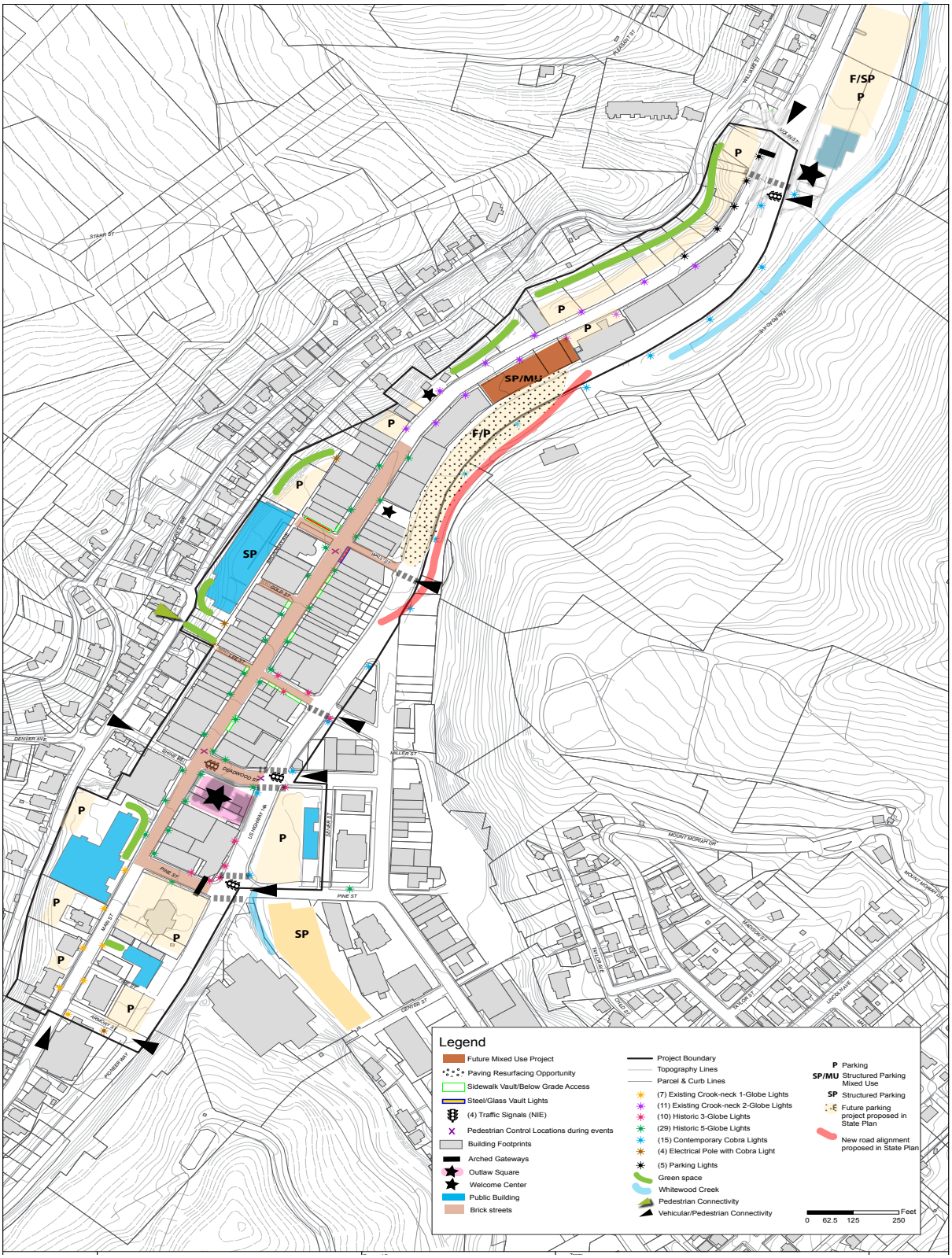
- A gateway sign is located at the northern end.
- Views to hillsides all around are present.
- A bend in the street occurs which captures a dramatic view up and down Main Street.
- Few historic buildings are present, one of which was recently restored.
- There are remnants of rock walls that were building foundations and retaining walls.
- The street is paved in concrete.
- Curbs and sidewalks are concrete and appear to follow the historic alignment.
- Several surface parking lots exist. These are “gaps” in the street wall of building facades.
- A variety of directional and regulatory signage exist.
- Newer streetlights are located near the curb.
- Some on-street parking exists and is metered.

Map #3: Existing Conditions

The Existing Conditions map on the following page locates some key surface features that are addressed in this plan. A key feature is the area with brick pavers. These are found in the Historic Core and extend from Main onto the cross streets in that area. The map also locates street lights throughout the corridor; different asterisk symbols differentiate those lights that are replicas of historic street lights from those that are more recent designs. Other lights are a crook-neck design. In general, the historic replica lights are found in the Historic Core and correspond to the portion of the street that is paved in brick. Crook-neck lights are located in the Lower Main and Upper Main Character Areas.

Historically significant steel and glass vault lights are located in the sidewalk along Main. These are features that should be preserved. The map also shows the general location of the proposed highway realignment and the potential parking area to be associated with that project. While it is not shown on the Existing Conditions map, it is important to note that the width of the public Right of Way, and the corresponding width of the street and sidewalks together, changes throughout the corridor. This means that a “one size fits all” street design is not practical.

Map #3: Existing Conditions (2020)



Existing Conditions

Replica light

Metal railing to underground stair

Where paving materials change

A mini-park example

A parklet example

Map #4: Design Framework

The Design Framework Map identifies places where improvements to the public realm are recommended. These include intersection improvements and enhancement of outdoor spaces. Note these and other improvement recommendations appear later in this chapter, where individual design topics are discussed in more detail. These are the key framework concepts:

1. Provide a string of small spaces for events and special activities.

These should be distributed throughout the corridor to extend the vitality of events into each character area. Potential locations are marked with gold stars on the map as "placemaking opportunities." These include publicly-owned open spaces as well as opportunities to create small parklets and plazas on private land. These places would add to the experiences of the larger gathering places, such as Outlaw Square, Deadwood Welcome Center and the Depot, which are marked with large black stars on the map.

2. Enhance continuity in the pedestrian and bicycle circulation systems.

Improve crosswalks throughout the area with designs that are compatible with the historic context. Expand the width of sidewalks where feasible to provide more space for pedestrians and street furnishings. (More detail appears later in this chapter.)

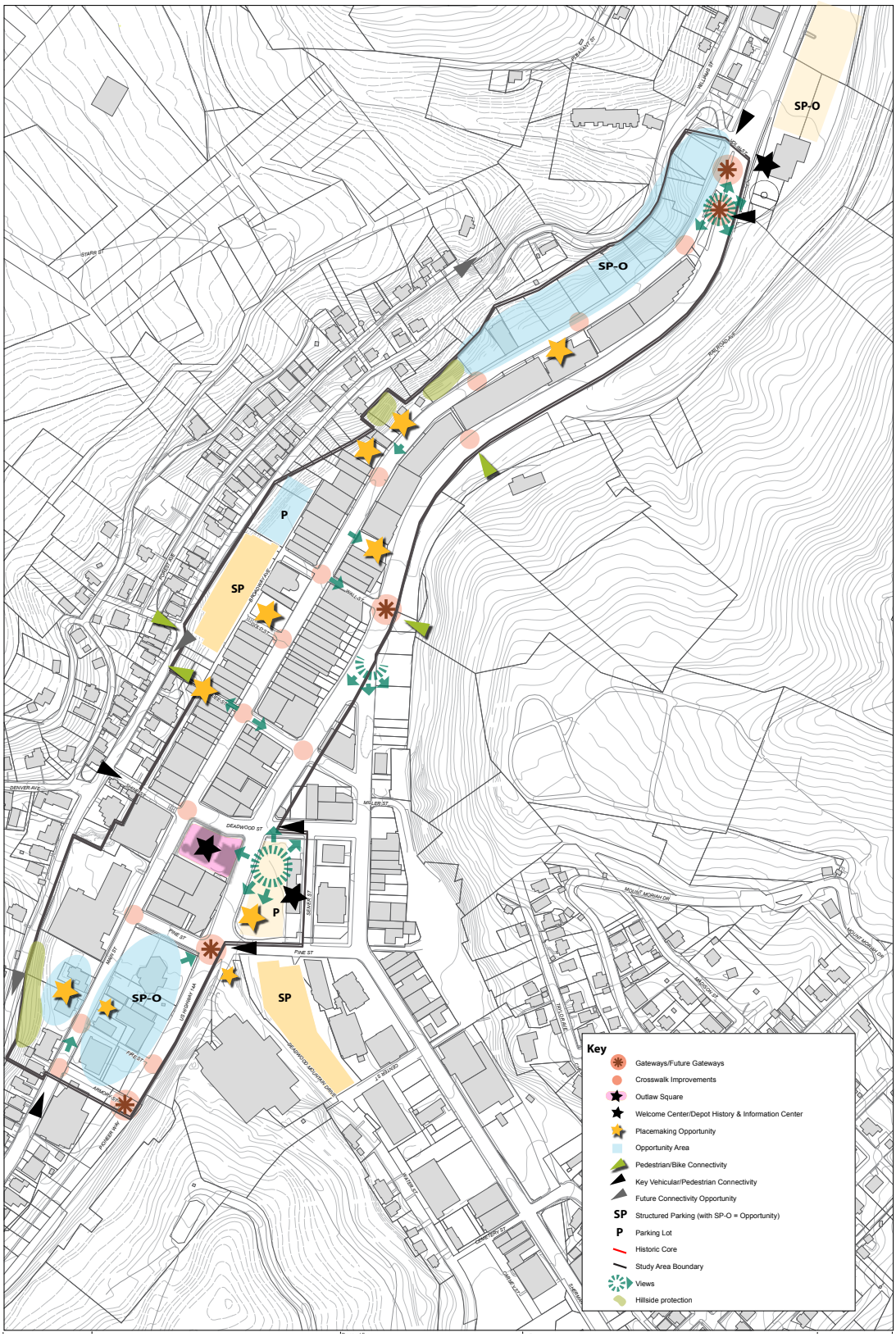
3. Enhance pedestrian crossings on Main Street at the intersections with these streets:

- Wall, Gold, Lee, Deadwood, Pine, Fire, and Armory.
- Include four mid-block crossings along Main Street, and one mid-block crossing at Sherman to improve pedestrian safety.

4. Enhance pedestrian crossings along the highway at the intersections with these streets:

- Lee, Deadwood, Wall and Pine.

Map #4: Design Framework



Gateway arch at Lower Main

Mini-park opportunity on Lower Main

5. Enhance access to parking facilities.

Plan for changing circulation patterns that will maintain access to the parking structure and other sites. Provide alternative access points where feasible. Also encourage construction of additional parking in structures that would be combined with other uses. Some potential sites are identified as “opportunity areas” on the map.

6. Enhance the gateways to Main Street.

Provide additional landscaping and street furniture as well as way-finding information. Conditions vary for each location; these are marked with asterisks placed in shaded circles on the map. This includes those at the intersection of Main with Pine and Wall Streets and the Visitor Center. Improvements can include landscaping, public art, countdown stop lights, speed humps, crosswalks defined by pavers, and potentially pedestrian activated lights where stop lights don’t exist.

- Consider moving the flashing sign at the Lower Main gateway to another location, and landscape the base of the gateway sign.

7. Provide space for service vehicles and transit.

This includes loading zones and stops for special transit vehicles, such as the stagecoach and trolley.

8. Provide space that can be used for staging special events.

This includes space for tents or other temporary structures.

9. Opportunity areas that interface with Main Street

There are several locations that could be enhanced to activate the pedestrian edge with new mixed use infill, or multifamily housing. The sites noted with SP-O could accommodate structured parking below grade, or on upper floors. The portion of the building at grade would be occupied by an active use.

Rehabilitate historic buildings such as Tin Lizzie. Activate the parking in front with a small plaza and streetscape improvements. This building has the potential to activate Lower Main.

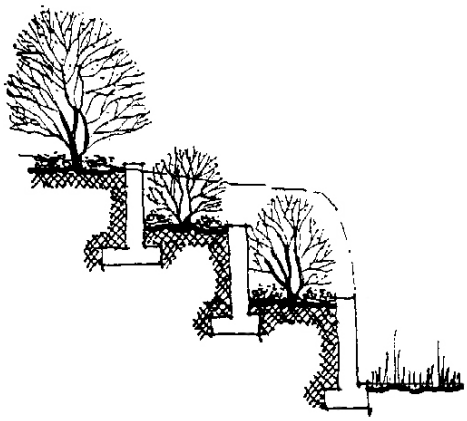
10. Views

There are a variety of key views. Views from these locations should not be blocked. In addition, there is an opportunity to provide interpretive signs to highlight the history in these locations.

11. Hillside protection

There are several locations along Main Street where the hillside has some significant erosion and/or visual clutter. These areas provide an opportunity to be enhanced with native vegetation (grass, flowers or similar plantings) to improve the experience along the street.

Potential hillside protection design



Potential stepped terracing for hillside enhancement

Flexible Lane Concept

In this plan, a “Flex Lane” is a part of the street which is designed to be adapted to different uses at different times during the year. It may be used as a place for pedestrians, either as additional sidewalk area, or for special events such as an art fair. Portions may be used for temporary outdoor seating (parklets). Other areas may be used for loading, either for transit vehicles or deliveries and perhaps parking for special conditions. It is not intended to be a travel lane for vehicles.

Note that in traffic engineering, the term sometimes is used differently, that is to mean a lane for moving vehicles, in which the direction of travel changes at different times of the day to accommodate a higher traffic volume in one direction versus the other. This is not the meaning in this plan.

Main Street Layout

With the work needed underground to improve utilities comes the opportunity to reconsider how the surface can be enhanced to accommodate the higher volumes of pedestrians that Main Street is experiencing while also maintaining basic service requirements. One option is to widen sidewalks where feasible; another is to define a “flex lane” which can serve a variety of uses in response to the cyclical nature of the street.

Key constraints and considerations for Main Street’s layout

With any change to the street layout, these are important factors to address:

- Maintain fire truck turning movements at key points along the street.
- Respond to the changing ROW widths.
- Consider seasonal changes in sun and shade on sidewalks for pedestrians.
- Maintain the ability to interpret the historic curb (details later).

Locating a flex lane

In some scenarios, a flex lane is proposed to be located along the west (hill) side of the street. This location works best for service and loading vehicles that would be entering Main Street from the north. This is true for special transit vehicles as well. It also provides more flexibility in handling turning movements for fire trucks getting onto Main Street from various entry points.

The flex lane would accommodate these uses, at various times:

- Additional space for pedestrians to walk
- Space for event tents
- Space for bandstands
- Space for loading zones
- Space for transit stops
- Other uses as needed

A set of custom-designed, movable fence segments would be used to mark off the flex lane for some of these uses. (See Chapter 7 for some conceptual sketches.)

Pedestrian circulation capacity

During busy days, sidewalks are at capacity and many pedestrians must step into the street. (Waste cans, newspaper boxes and other furniture may also impede circulation in some areas.)

Issues:

- Sidewalk widths are not adequate during larger events for pedestrian travel, and are too congested when events such as parades and concerts occur.
- Streetscape furnishings constrain sidewalk carrying capacity for pedestrians.

Narrow pedestrian pathway

Crosswalk & sidewalk improvement and repair

Issues:

- Some sidewalks need to be repaired or reconstructed. Other places are missing sidewalks altogether. These conditions discourage pedestrian circulation.
- Pedestrian crossings are poorly defined at intersections and where mid-block crossings are needed.
- In some conditions, a new proposed intersection ramp could be in conflict with an accessible sidewalk route.
- When making improvements, meeting standards for accessibility is important. However, full ADA compliance may be difficult, because the necessary increase in sidewalk width, changes in curb line, and sidewalk ramps details may result in a negative impact on the district's historic significance.

Recommendations:

- Complete missing segments of sidewalks to create a continuous pedestrian circulation system.
- Highlight crosswalks with a change in material to clearly identify pedestrian crossings. For example, two simple concrete strips on either side of the proposed brick paving could be used.
- Reconstruct sidewalks and ramps to the degree feasible while preserving the integrity of the historic district.
- Use durable materials that can withstand snow plowing.

Congested sidewalks during special events

Widening sidewalks

If a lane were to be located on the west side, room would exist to expand some segments of the sidewalk along the east (highway) side of Main Street. The extent of the widening varies, depending upon ROW dimensions. Where the sidewalk would be widened, it is important to continue to express the location of the historic curb line. This could be accomplished with changes in paving and curb details.

Vehicular and pedestrian gateway improvements

- Enhance the Gateway experience at Main Street, Pine Street, Wall Street and the Visitor Center. Improvements can include landscaping, public art, countdown stop lights, speed humps, crosswalks defined by pavers, and potentially pedestrian activated lights where stop lights aren't present, etc.
- Consider moving the flashing monument sign to another location, and enhance landscaping around the new gateway sign to improve the entry experience for all modes of transportation.

Parking Systems

Parking is, of course, a critical component for the vitality of downtown throughout the year and in particular for special events. The supply of parking spaces, their location and how they are managed are key variables. The role of other alternatives to private motorized vehicles is also an important factor; this includes transit as well as pedestrian and bicycle systems. A goal is to locate parking where it will minimize conflicts with pedestrian circulation and, to the extent feasible, encourage motorists to park at the perimeter of the area and then walk or use transit. Including structured parking in development projects also should be encouraged. Creating new surface lots along Main Street should be avoided.

Map #5: Public And Private Open Space

The “Public and Private Outdoor Opportunities Map” identifies where potential improvements could occur to outdoor areas along the Main Street corridor. (Some of these sites are also shown on the Framework Map #4.) The focus is on providing outdoor spaces to accommodate formal outdoor events as well as places for casual enjoyment. These spaces are in addition to that provided in the Flex Lane options. In each case, they should be designed to be compatible with the historic streetscape palette. These are some of the improvements shown on the map:

Temporary parklet located at the curb

Broadway improvement area

This includes a stretch of Broadway along with the abutting segments of Lee, Gold and Wall Streets. This area would be improved to facilitate vehicular circulation while also providing space for outdoor uses at times. This would be enhanced with overhead, exposed “Edison” lights to add sparkle and a sense of vitality. Outdoor dining and seating could be provided in the cross streets. Planters could also be incorporated.

Festival lot converted for market day

Festival lots

A “festival lot” is one that is designed to function as a conventional parking lot on many days, but can be converted for use as a place for festivals, concerts and markets. It includes substantial landscaping, as well as water and electrical supply. The surface is typically enhanced with decorative paving. The lot in front of the depot is an ideal location.

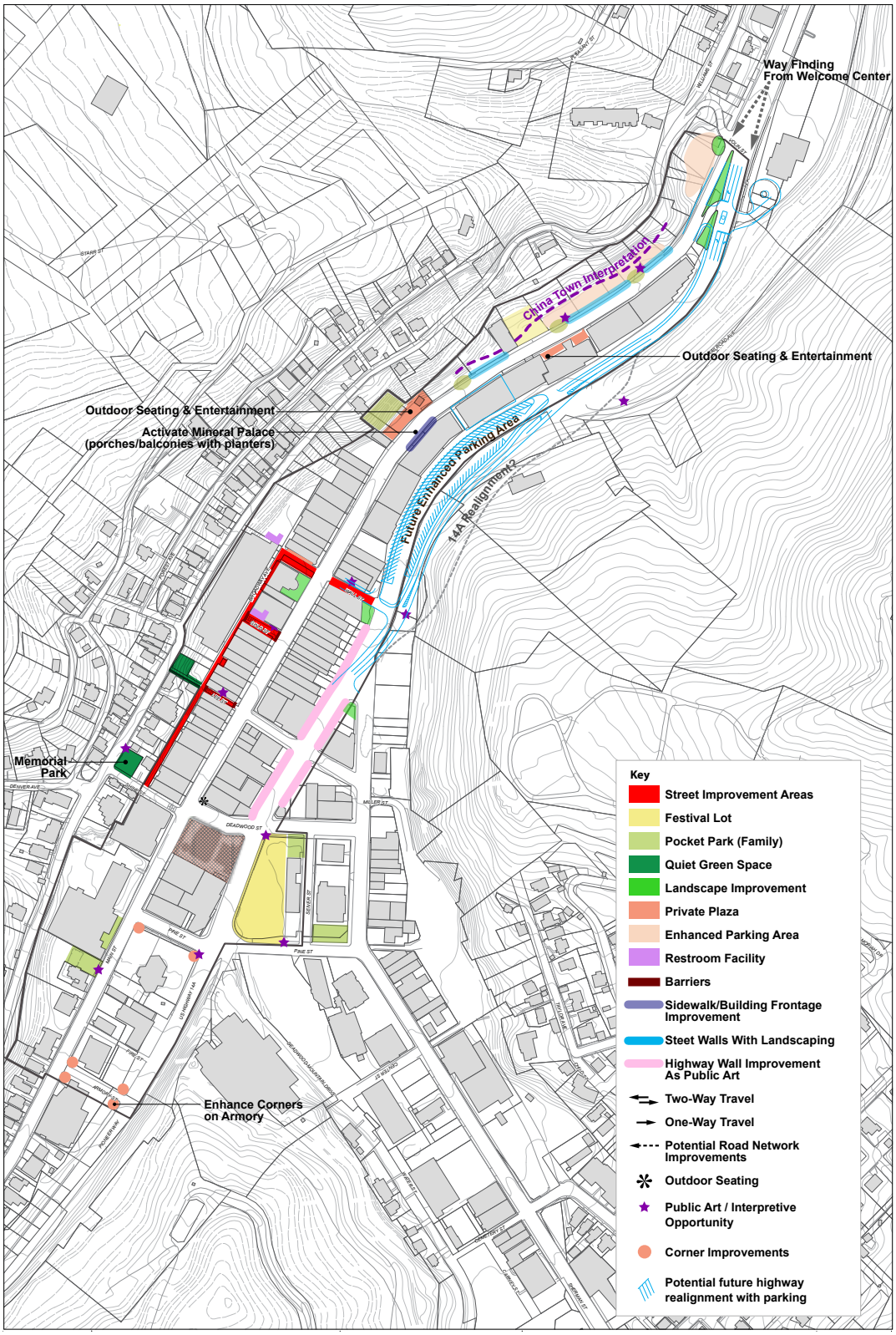
Pocket parks

These are small plaza areas that typically have a bench, light fixture, trash receptacle, with a landscape accent or planter. They are often located adjacent to the sidewalk or close by. They may be on public or private land.

Quiet green space

These are small parks with a more natural character and are for passive use. Furnishings would include a bench and perhaps an interpretive marker or sculpture.

Map #5: Public And Private Open Space



Private plaza

These are privately owned areas that could be enhanced with high-quality outdoor seating, decorative paving, and plantings. They could be used for dining and or light entertainment. The space at Bella Joli could be especially exciting since it is located at the bend in the road along Main Street and could draw people down to Lower Main, and on further to Tin Lizzie, thus activating this end of Main Street. Tin Lizzie parking area in front of the historic building is also a prime location.

Enhanced parking area

These parking areas could be enhanced with streetscape furnishings, interpretive panels, and landscaping to improve the experience for pedestrians.

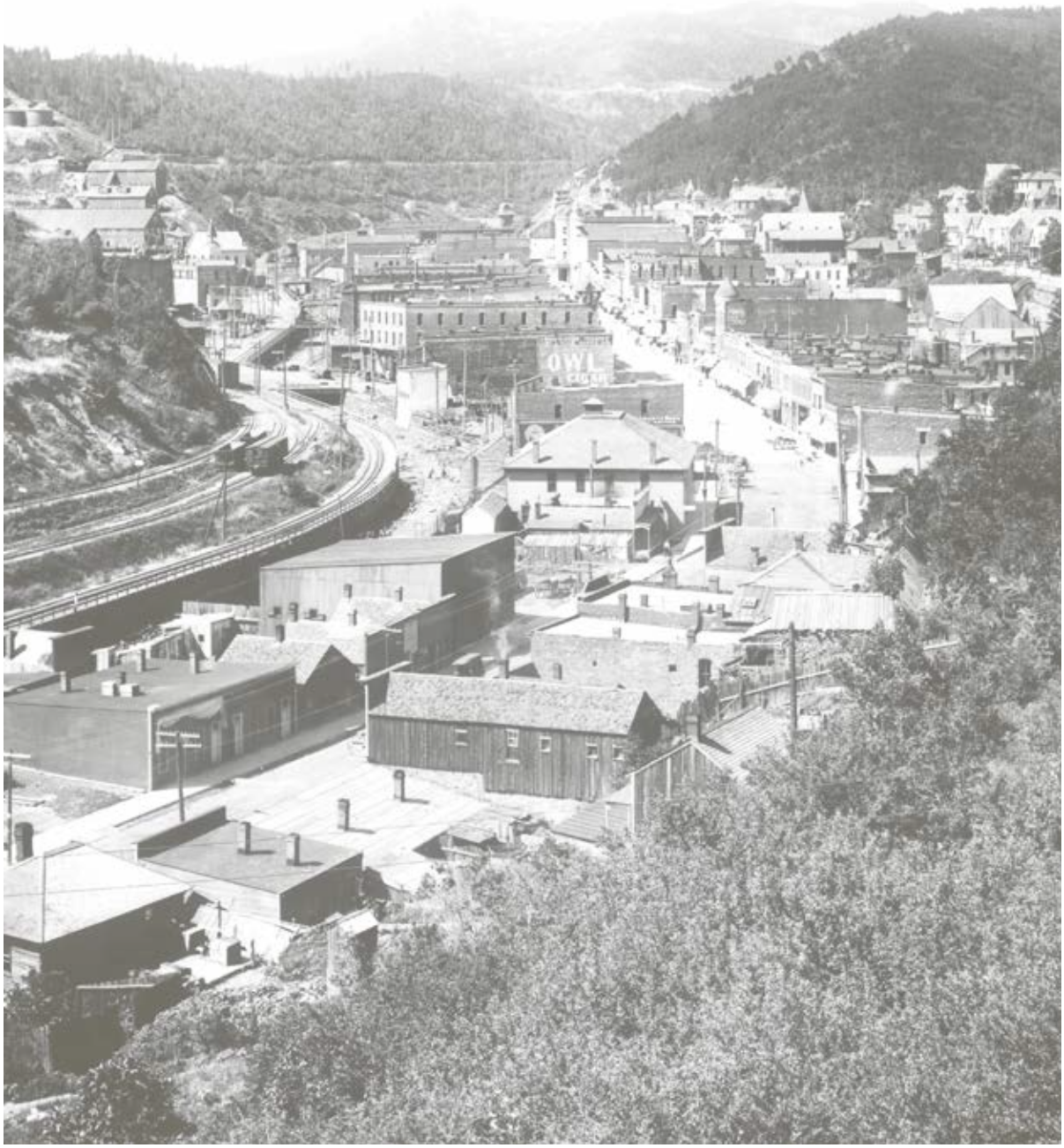
Opportunity for enhanced parking area

Restroom facilities

An additional public restroom facility is needed. Various alternative locations convenient to Main Street are shown for further study.

Highway realignment

The proposed highway realignment provides opportunities for urban design improvements that would benefit Main Street. This includes providing parking, transit stops and enhanced sidewalks. See Chapter 8, “Special Design Areas” for related recommendations.



CHAPTER 5

VEHICULAR AND PEDESTRIAN CIRCULATION

This chapter provides more detail about proposed improvements to the vehicular and pedestrian circulation systems related to Main Street. It builds on the general concepts described for the Framework Map #4 as well as the recommendations presented in Chapter 4 for improvements to certain system components. It includes three different scenarios for vehicular circulation, in terms of how the street can be managed to accommodate traffic during periods of relatively low use and for those with high levels of activity when portions of Main Street may be closed for a special event. It also provides recommendations for circulation improvements at specific locations within the planning area.

Truck loading on Main Street

Circulation Policies:

These are fundamental objectives for the pedestrian and vehicular circulation systems:

1. Assure that Main Street is an engaging experience at all times of the year.
2. Maintain vehicular traffic flow on key parts of Main Street throughout the year.
3. Welcome a variety of vehicular modes, including the stagecoach, bike carts, taxis, and the trolley.
4. Enhance the visitor experience, in terms of the ways in which they gain access to Main Street.
5. Minimize impacts of large service vehicles and tour buses.
6. Maintain service access along the corridor.
7. Provide clear wayfinding to parking resources.
8. Promote compatible transit access to Main Street.

Alignment Of Deadwood Street & Shine Street

Main Street's alignment with Shine contributes to circulation issues in the area. Shine connects with Main at a steep angle, and the intersection itself is slightly offset, although

Intersection with Shine Street

Position loading zones to avoid impacting street lights.

it was improved as part of the Outlaw Square construction project.

Motorists climbing the hill during winter weather conditions seek to gain speed as quickly as possible. This can cause conflicts with other circulation movements, particularly for pedestrians.

A traffic signal operates at this intersection, which reflects the previous configuration. It does not provide push-button crossing demand options for pedestrians nor does it have audible signaling. This is a complex intersection, with functional issues that require further analysis of alternatives and discussion of acceptable solutions.

Issues:

- Street widths vary and crosswalks are at angles.
- Traffic signals are not oriented to pedestrians.
- The current offset intersection alignment slows traffic from the Hill; any realignment may increase auto speeds.
- Access to uphill neighborhoods west of Main can be impacted if Deadwood Street is closed for events associated with Outlaw Square.

Recommendations:

- Working with the existing alignment, provide these improvements:
  - Install new traffic control devices that better orient to pedestrians. Use a design that is compatible with the historic context.
  - Delineate crosswalks more clearly to promote safer crossings.

Parking Access (In General)

Parking exists in surface lots, structures, and on-street parking spaces. Some of these are private and others are public. A mix of metered systems is used. A parking plan for downtown should be developed that more clearly defines parking need and explores creative alternatives. This would facilitate informed decision-making about parking systems. In the interim, these are some issues to address and opportunities for improvement:

Issues:

- There is not enough parking in the core for larger events. Maximizing the use of outlying resources is important and improving pedestrian access from these locations is important.
- Some parking areas are underutilized. Enhancing wayfinding to these resources is important.
- During large events, vehicles seeking to enter the parking structure on Broadway compound traffic congestion.
- Maintaining access and egress to the parking structure on Broadway constrains larger Main Street events.
- On-street parking and loading/unloading zones along Main Street interferes with traffic and impacts the pedestrian experience.
- Many private surface lots lack landscaping and negatively impact the pedestrian experience.

Recommendations:

- Enhance circulation options to access parking for large events.
- Improve surface lots and explore where other parking opportunities could occur.
- Provide landscape enhancements to surface parking lots.
- Enhance the lot at the Deadwood History and Information Center to better accommodate its use for special events. Install decorative paving, provide electrical infrastructure, and potable water.

Example of a mini-park as an amenity

Parking Access During Special Events

The many events that occur on Main Street throughout the year often require special traffic management measures to direct traffic to parking. Many motorists seek to park in the structure west of Main, although the parking lot which is located at the lower end of Main Street, near the Welcome Center, helps to “intercept” some of this traffic. Motorists are encouraged to park there and then walk or use the trolley to access Main Street. Even so, a more comprehensive plan for managing traffic and directing cars to appropriate parking locations is needed.

Issues:

- Turning movements onto Main and Deadwood Streets contribute to congestion.
- Lee Street often is closed during Main Streets events. This complicates access to hotels nearby. In some cases hotel patrons must back out onto the highway. For hotel guests who park on the east side of the highway, pedestrian crossings are inadequate as well.
- There is only one route in and out of the Main Street (Broadway) parking structure.

Recommendations:

- Improve the pedestrian crossings at Lee Street.
- Provide a second auto access from the upper level deck of the parking structure, connecting to Williams Street.
- Enhance the use of alternate modes to lessen the impact of vehicles parking in the Historic Core. For example, locate bicycle parking facilities at the outlying parking lots to encourage bicycling into town
- Provide more trolley service for peak times, in order to encourage parking remotely.
- Consider limiting left turns to relieve traffic congestion.
- Consider other locations for another parking structure on the perimeter. A parking study would help to determine when demand is sufficient to merit another structure.

Parking Meter System

The city has installed pay kiosks in some locations in the downtown. Other places have older meters, particularly on lower portion of Main Street. This system uses a passport (phone) feature, but the meters themselves cannot accept credit cards.

Issues:

- Using different types of parking payment systems may discourage use.
- Payment policies for motorcycles need to be defined.
- Residents have to feed the meter during off peak days (November to March).
- Credit cards aren't accepted at pay kiosks.
- Parking meters and signs clutter the district.

Recommendations:

- Consider providing free parking during off-peak days (November to March).
- Consolidate pay kiosks and limit the number that are placed along the street. Ideally, one should be placed per block, or every 400 feet.
- Consolidate parking and similar street signage with pay kiosks.
- Make the payment system easy for everyone to use, including motorcycles.

Moveable stage stop fence

Transit Circulation Improvements

Many types of vehicles travel on Main Street. These include shared ride automobiles, buses, service trucks, and trolleys. Special modes, such as the stagecoach, also use Main Street. Many of these users stop on the street and some even seek to park there. This adds to congestion and negatively impacts the users' experience. These are some specific modes to address:

Issues:

- The trolley has 14 stops on Main Street; its frequent stopping can impede other traffic flow.
- The stagecoach requires a stoop to load and unload. This can be a sidewalk impediment.
- A large number of tour buses travel on Main Street. Approximately 700 buses circulate through Main Street each year. Some load and unload at the Depot Visitors Center, as recommended, but others continue onto Main Street. They cause congestion and also emit fumes when idling at loading areas.

Recommendations:

- Enhance the stagecoach stop on Upper Main Street in front of the Franklin Hotel.
- Limit the number of trolley stops along Main Street.
- Limit the number of buses on Main Street. Consider requiring buses to unload at the Welcome Center and then encourage folks to walk, bike or ride the trolley. Pick-up could then be provided on Upper Main Street.

Jersey barriers detract from the historic character.

Traffic & Pedestrian Control Devices And Public Safety Bollards

The city uses portable barriers to close streets for special events in the street.

Issues:

- Installing and removing Jersey barriers and temporary fencing is time-consuming.
- Jersey barriers and temporary fences detract from the historic character of the setting.
- Some people interpret the Jersey barriers to mean that a road construction project is underway.

Recommendations:

- Develop a vehicular control system that is more in character with the historic context and that is easier to manage. A variety of options should be explored including:
  - Moveable planters, compatible with the streetscape palette
  - Retractable or otherwise movable bollards
  - Decorative, custom-designed concrete barriers. These could incorporate historic themes as sculpture or graphics.
  - Ornamental metal fencing, in interlocking segments.

Vehicular Access During Different Levels Of Activity On Main Street

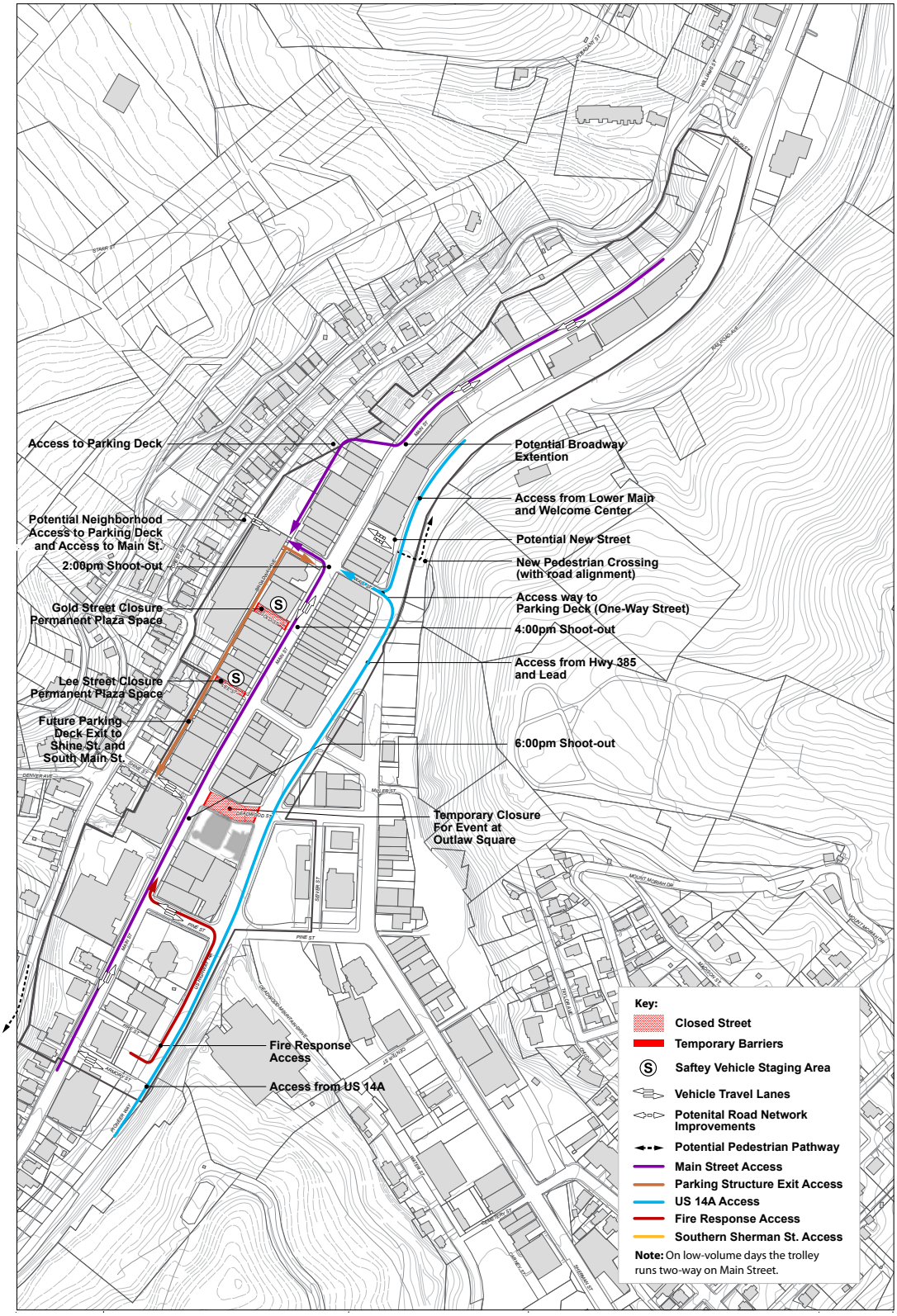
A series of three maps follows:
Map #6: Low Volume, No Street Closure
Map #7: High Volume, with Main Street Open
Map #8: High Volume with Main Street Closure

These explore variations in circulation patterns that may occur on Main Street during different levels of use, in terms of traffic volumes and locations of special events. Each scenario considers how private vehicles, public transit and emergency response vehicles would circulate in the area. The scenarios work with the streets that exist and also include the potential benefits of a new street to the parking deck and of a new street between Main and the highway. Each scenario also assumes that the western segments of Lee and Gold Streets are designed as plazas, with limited vehicular access. Finally, they each include an improved pedestrian connection to the creek trail, which would occur in conjunction with the box culvert project.

These are key variables that are considered in each scenario:

1. How fire trucks can access Main Street
2. How motorists can access the Broadway parking garage
3. How the trolley can access Main Street
4. Where emergency response or safety vehicles could be positioned during peak events
5. Where a portion of Main Street may be closed for an event

Map #6: Low Volume, No Street Closure



Map #6: Low Volume Access Scenario Without Main Street Closure

In this scenario, a relatively low volume of visitors is in town and Main and Wall Streets remain open to traffic. Visitors are able to gain direct access to the parking structure. Even so, wayfinding systems should encourage motorists to use routes that avoid the core of Main. Deadwood Street could be closed in this scenario, to expand space for an event with Outlaw Square. This low-volume scenario has these features:

Event spaces that could be in use for this scenario:

- Outlaw Square
- Gold Street, on the uphill (west) side
- Lee Street, on the uphill side

Parking garage access and egress

- Cars arriving from the north are encouraged to stay on Highway 14A and turn onto the potential New Street between Mineral Place and Celebrity Hotel, or approach on lower Main Street and turn onto the potential new Broadway Extension to enter the parking garage.
- Cars arriving from the south also are encouraged to continue on Highway 14A and turn onto Wall Street to access the parking garage, but they may drive along Main Street.
- Southbound cars exiting the parking garage turn south onto Broadway Avenue and turn at Shine Street to access Highway 14A from Main Street, or a cross street via Main Street.
- Northbound cars exiting the parking garage would turn left onto Main Street via Wall Street. They may continue on Lower Main until merging with the highway, or they may jog over to the potential New Street and then turn onto the highway.

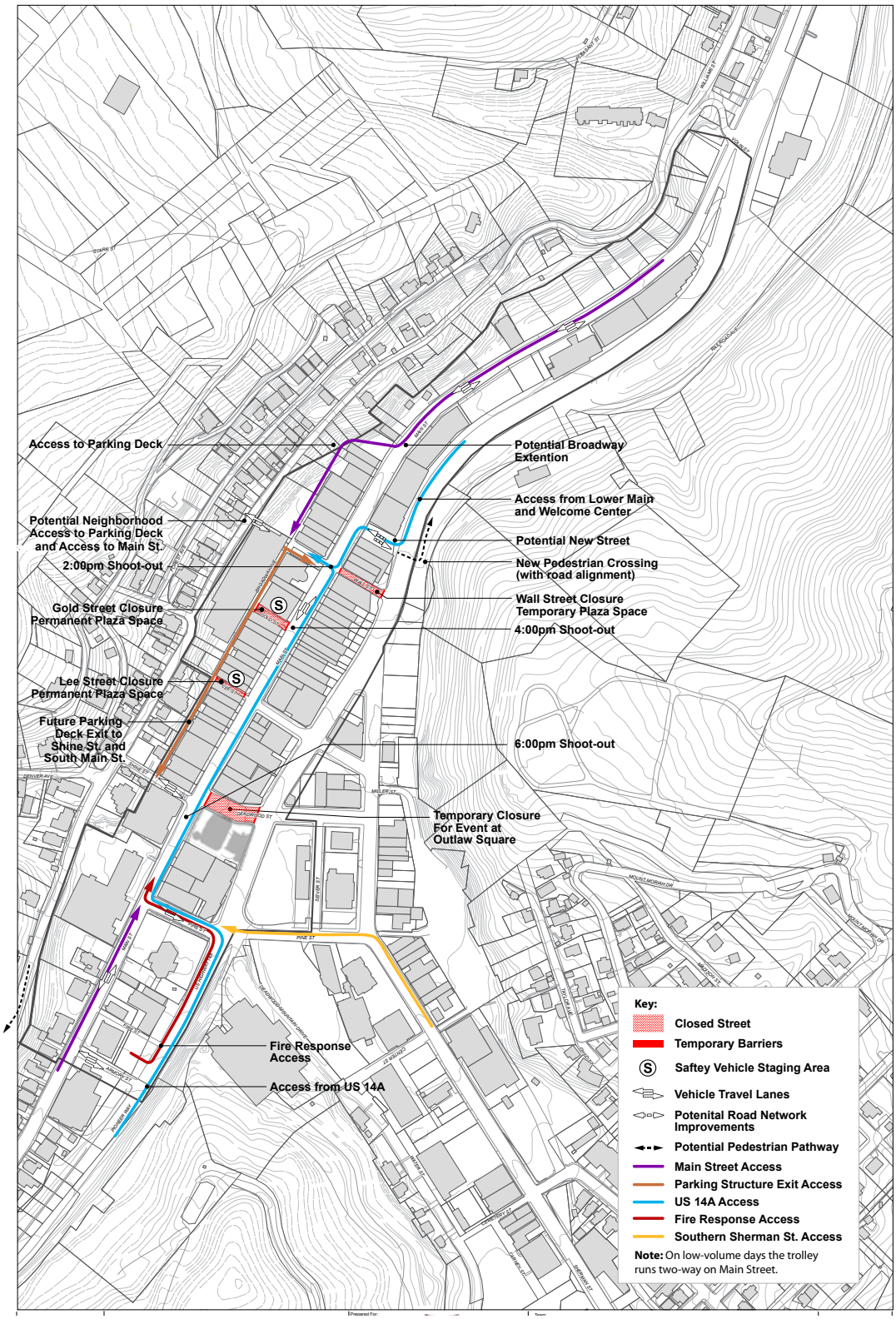
Trolley circulation

- Trolleys follow their normal routes.

Fire response access

- Emergency response vehicles get to Main Street via Pine or Deadwood Streets.

Map #7: High Volume, With Main Street Open



Map #7: High Volume Access Scenario With Main Street Open

This scenario considers a high volume of visitors. Deadwood Street, Gold Street, Lee Street (on the uphill side) and Wall Street (on the highway side) are closed to provide spaces for events, but Main Street remains open. (An example may be for the Sturgis motorcycle rally.) While Main Street remains open, wayfinding systems direct traffic to minimize congestion on Main Street. This high volume scenario has these features:

Event spaces that could be in use for this scenario:

- Outlaw Square
- Gold Street (uphill side)
- Lee Street (uphill side)
- Wall Street (Highway side)
- Deadwood Street

Parking garage access and egress

- Cars arriving from the north are encouraged to stay on Highway 14A and turn onto the potential New Street between Mineral Palace and Celebrity Hotel, or they may approach on lower Main Street and turn onto the potential new Broadway Extension to enter the parking garage.
- Cars arriving from the south also are encouraged to stay on Highway 14A (rather than driving up Main Street) and turn onto the potential New Street to access the parking garage.
- Southbound cars exiting the parking garage turn south onto Broadway Avenue and turn at Shine Street to access Highway 14A from Main Street.
- Northbound cars exiting the parking garage would turn left onto Main Street via Wall Street. They may continue on Lower Main until merging with the highway, or they may jog over to the potential New Street and then turn onto the highway.

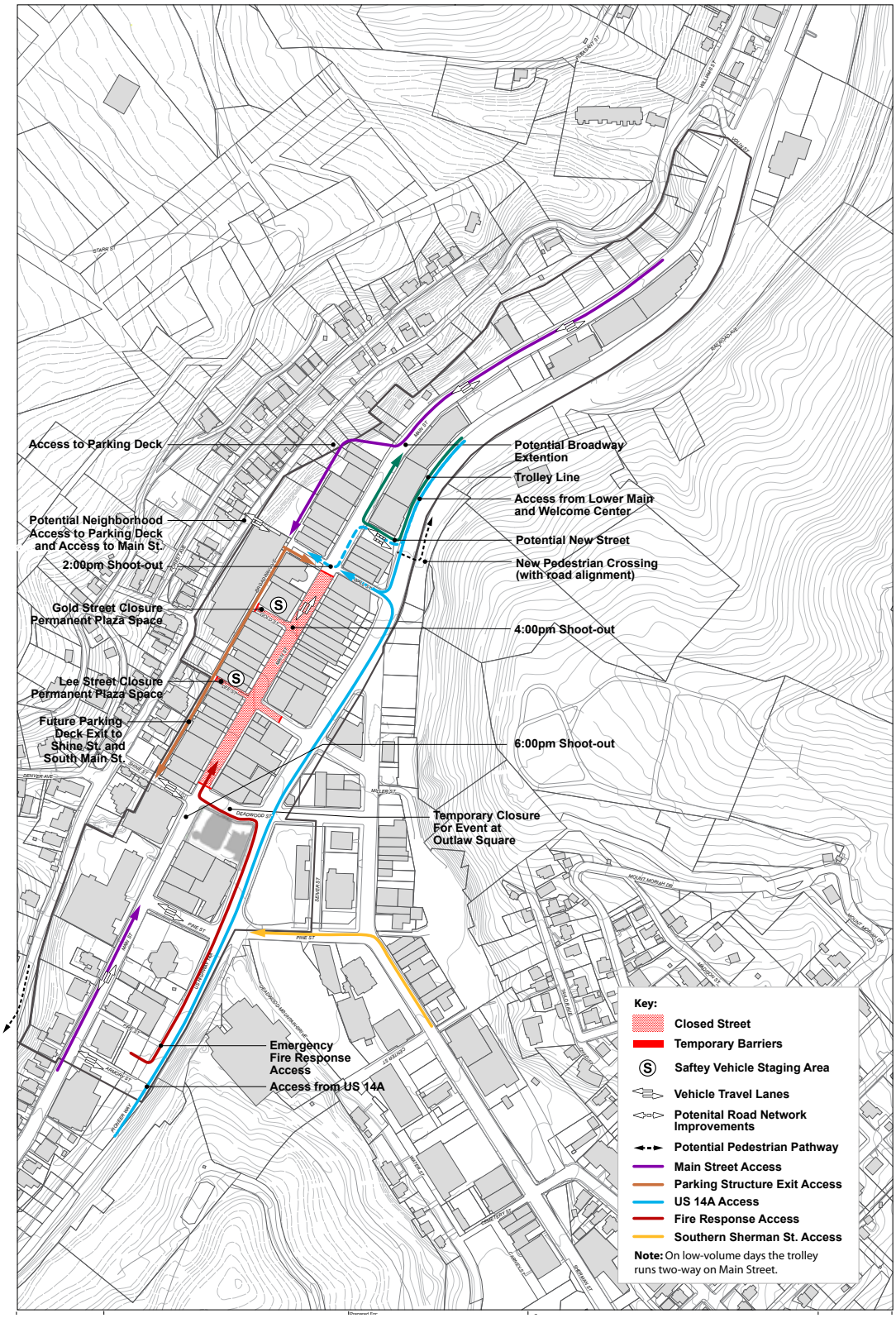
Trolley circulation

- Trolleys continue their normal routes, except avoiding the closures on Deadwood and Wall Streets.

Fire response access

- Emergency response accesses Main Street via Pine Street.

Map #8: High Volume With Main Street Closure



Map #8: High Volume Access Scenario With Main Street Closure

In this scenario, a high volume of visitors is in town and a portion of Main Street is closed to provide space for event. Deadwood Street and Wall Street remain open. Wayfinding systems direct traffic to avoid the core of Main Street. This high volume scenario has these features:

Event spaces that could be in use for this scenario:

- Outlaw Square
- Gold Street (uphill side)
- Lee Street (uphill side)
- Main Street (from Deadwood Street to Wall Street)

Parking garage access and egress

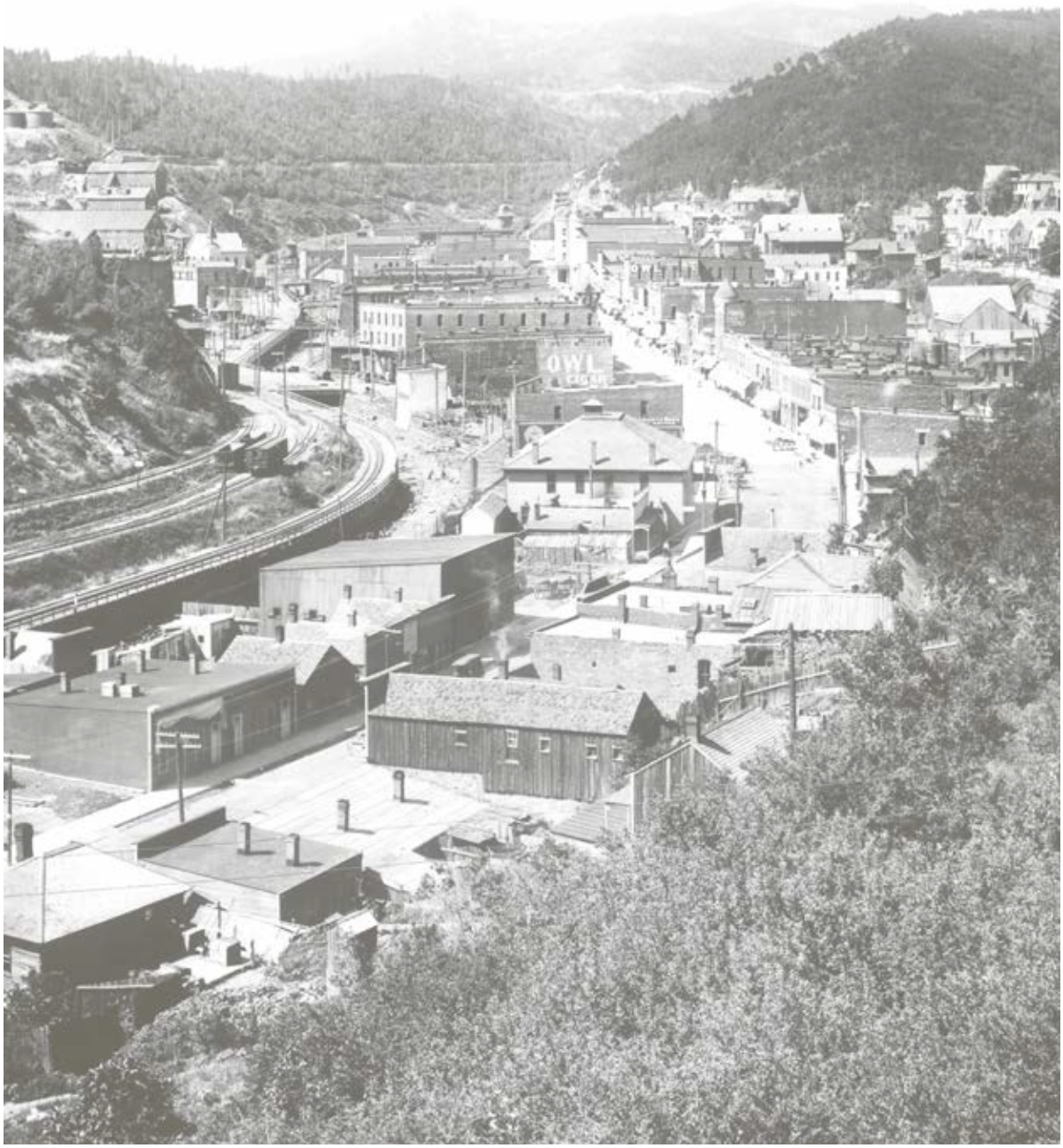
- Cars arriving from the north are encouraged to stay on Highway 14A and turn onto the potential New Street between Mineral Palace and Celebrity Hotel, or approach on lower Main Street and turn onto the potential new Broadway Extension to enter the parking garage.
- Cars arriving from the south also continue on Highway 14A and turn onto Wall Street to access the parking garage.
- Southbound cars exiting the parking garage turn south onto Broadway Avenue and turn at Shine Street to access Highway 14A from Main Street or Deadwood Street.
- Northbound cars exiting the parking garage would turn left onto Main Street via Wall Street. They may continue on Lower Main until merging with the highway, or they may jog over to the potential New Street and then turn onto the highway.

Trolley circulation

- Trolleys arriving from the Welcome Center would proceed south on Main Street and exit on the potential New Street; or, they could approach on Highway 14A and turn onto Main Street on the potential New Street and return southbound on Main Street.

Fire response access

- Emergency response vehicles would access Main Street via Pine Street, or Deadwood Street.



CHAPTER 6

INFRASTRUCTURE IMPROVEMENTS

This chapter addresses various components of the infrastructure associated with Main Street. It includes discussions of underground utilities as well as above-ground features of the street and sidewalks. It incorporates assessments by the planning team as well as information from a very extensive investigation of some utilities, which is published as an accompanying document to the Main Street Plan. Titled “Main Street Master Plan Engineering Report,” it should serve as a starting point for more detailed design work, which is described in the Implementation Chapter of this plan.

6oo Block of Main, east side

Based on the investigations, a substantial amount of surface disturbance is going to be necessary. This includes water and sanitary sewer service. As a result, it is appropriate that this work be completed in conjunction with and\or prior to any substantial surface replacement effort.

Preserving the integrity and placement of the curb line is paramount to this project’s goals in achieving a balance between modern design standards of handicap accessibility and the preservation of Deadwood’s unique history and culture. Driving the recommendation to repair the water servicing system as a whole, the sanitary servicing defects, and storm draining issues is the desire to avoid patchwork surfacing.

Key Findings:

1. Some underground utilities need significant repair. This is a key factor in determining the strategy for other improvements to Main Street, because it means that excavation and reconstruction will be necessary.
2. Work on underground utilities provides the opportunity to make surface improvements that would enhance the operation of Main Street.
3. Repaving Main Street is needed to address areas of deterioration and to improve the visitor experience.
4. More detailed investigation of some specific underground conditions is still needed and should occur during a more detailed design phase of project improvements.

The Process Of Investigation

An engineering team, led by Ferber Engineering Company, Inc. (FEC), compiled materials that document the existing conditions in the utility systems and components of the street infrastructure. A first step was to establish property boundaries. They performed legal document research and conducted field survey to reconstruct the property boundaries in the study area, with a focus on the Main Street corridor. Also included was surveying all public and private utility networks and performing detailed investigations of the sanitary sewer, water, and storm sewer systems.

Locating and mapping properties

Part of FEC's scope of work was researching and reconstructing property boundaries in the project area. The sole use of this data is for the purpose described herein and shall only be used as reference for any other function. Legal property records research and information from field surveying were used to build the project legal base. All records that were recoverable, along with physical evidence in the field, were used to construct this property base. In Appendix A , Engineering Report, Figure 1 shows a map of the property as reconstructed.

Utility investigation

The utility investigation consisted of a focused approach in which each utility company was contacted and FEC worked with their representatives directly to obtain accurate field locates of utilities. Public utility background data was acquired from the City of Deadwood. This information was used as a basis for field location and mapping of public utilities, and the sanitary sewer investigation. Upon completion of the field survey, data reduction was performed resulting in a pipe network representation of each utility. In Appendix A, Engineering Report, Figures 2 - 11 illustrate each utility.

Below Ground (Sub-Surface) Components

This section focuses on sub-surface utilities, with some related above-ground features also discussed.

Sanitary sewer

Investigation

An in-depth sanitary sewer investigation included the sanitary sewer system contributing to Main Street, from Armory Street to Highway 14A, and the condition of 35 manholes in the study area was assessed. (See Appendix A, Engineering Report, Figure 2).

Sanitary sewer lateral taps for each section of Main were assessed. Defects, bends, and material changes within the Right-of-Way were surveyed. Smoke testing also was conducted. A drone was also deployed to supplement the on-the-ground observation capabilities.

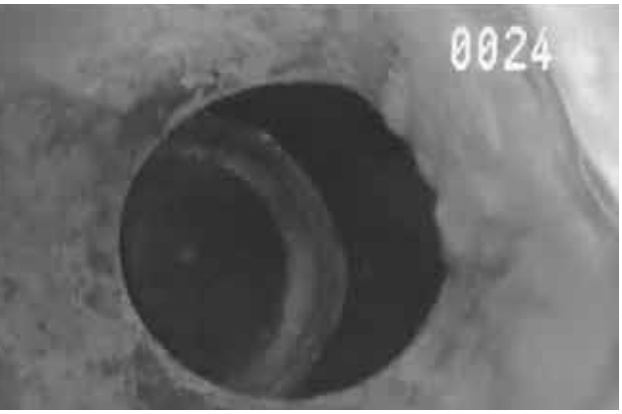
Findings

Overall, the sanitary sewer mains within the project area are in good working condition. Most issues are due to grease buildups. Appendix A, Engineering Report, Figure 2 illustrates the sanitary sewer system.

Defects observed during the sewer investigation included minor sags, grease buildup, and sediment deposits in the mains. Sags can end up creating a long-term maintenance issue when sediment and other debris settles in the main, eventually creating a blockage.

Two properties had service lines which connected to and\or ran through a neighboring property.

The most notable defect found during smoke testing was a missing cleanout cap on the service outside a residence on Williams Street. Another damaged cleanout was observed on Main Street. Additionally, two power cabinets along the Highway 14A side of Main Street properties exhibited significant smoke defects. One other power cabinet defect was detected on the north side of the parking garage on Broadway Ave. There were also four vented manhole covers



Example of sewer service joint separation

discovered, one service lateral connection issue on Main Street and one potential downspout connection detected. Five buildings also detected smoke inside during testing, all of which are located along Main Street, between Shine Street and Gold Street.

Recommendations:

The sanitary sewer system would be best served by spot fixing the issues highlighted above, especially with regards to servicing. Overall, the mains and manholes appeared to be in good shape. Any manhole cover and rim with perforations should be replaced with ones that have none to reduce inflow potential. FEC also recommends the installation of chimney seals in the upper areas of cone sections to prevent infiltration during wet periods.

Water system

Investigation

The water system investigation consisted of reviewing as-constructed plans, interviewing City staff, and reviewing existing GIS information. Infrastructure locations were field surveyed.

Findings

No detailed investigation into the water system (Appendix A, Engineering Report, Figure 3) was performed. However, based on recently completed FEC work in downtown Deadwood and discussions with Public Works Staff, several potential water service-related issues were identified. Primary among these concerns is premature corrosion of various water system components. The water system was constructed in the early 1990's and is comprised of a combination of PVC (plastic) pipe and ductile iron (metallic) fittings. Public Works Staff have specifically identified that the bolts on a number of valves have experienced significant corrosion. Corrosion was also evident on metallic components of the water system in Deadwood Street, which was recently reconstructed as part of the Outlaw Square Project as shown in the photos on the right. Other issues include a handful of situations in which there are shared water services and\or multiple meters in one building.

There is a need to inspect every fitting. This could occur prior to or most likely in conjunction with an overall street reconstruction. At that time, every valve and metallic fitting should be exposed, inspected, and a decision then be made to either wholesale replace the valves and other fittings, replace bolts, and\or connect an anode for further protection. Also, the installation of tracer wire access boxes and the relocation of existing faulty tracer wire from inside the valve to a separate access box will greatly increase the probability of proper system maintenance.

Metallic Component Corrosion

Uniformity should be established across the water service system, with one meter per service. In situations where two businesses are currently sharing a single service and meter, the preferred remedy is to provide a second service connection and meter. This should occur during an overall reconstruct to alleviate any potential financial burden on the owners.

Valve Corrosion

Future waterline replacements in conjunction with the Deadwood Box project under Highway 14A also should be considered. The exposed water mains should include some form of protection, either in the form of heated ductile iron, heat tape, or some other sufficient freeze protection.

Recommendations:

- Conduct a complete inspection of all water system fittings and conduct repairs or replacement to each component as needed. Install tracer wire as needed also.
- Establish uniformity in water service metering, with one meter per service.
- Coordinate potential water line replacement with the box culvert project.

Storm sewer system

Investigation

The storm sewer system investigation consisted of reviewing as-constructed plans, talking with City staff, and reviewing existing GIS information. Visual inspections of the inlets and pipes were also performed in the field.

Findings

From the surface, visual inspection of the storm drain system indicates it is in relatively good shape. Gold Street and a small section of Broadway Avenue, near the parking garage, have known issues of disjointed and\or plugged pipes which will warrant some pipe replacement (Appendix A, Engineering Report, Figure 4). The Hampton Inn at Tin Lizzie's is another area of potential drainage concern. The finished floor elevation of the hotel is low in relation to the adjacent street. During significant precipitation events, water leaves the street and ponds in the hotel entryway.

On Main Street, the final design of the street section, which may involve moving some curbs, will dictate whether the location of the existing storm sewer inlets can remain or should be relocated. If the final street design dictates relocation, an evaluation of which portion of the existing storm drainage system should occur.

Recommendations:

- Consider pipe replacement near the parking garage in Gold Street and Broadway Avenue.
- Locate storm sewer inlets to fit the new street section
- Reuse historic inlet grates to the extent feasible.
- Where there are drainage issues (ponding), make adjustments to the street and curb profiles along with the potential addition of storm inlets to resolve this issue.

Private utility coordination

Private utility providers were contacted and questioned to determine if they would wish to consider making improvements to their systems as part of a street and utility improvement project. Some indicated they would seek to take advantage of the street construction work and coordinate improvements. Others did not need see the need to make upgrades. Some providers did not respond to the query.

Recommendations:

- Coordinate improvements to private utilities with public sector work to the extent feasible.

Basements and coal chutes under sidewalks

Some buildings have sidewalk basements/coal chutes that extend under the sidewalk and need to be addressed in conjunction with other Main Street improvements.

Issues:

- Sidewalk basements and coal chutes limit options for placement of street furniture and the ability to provide an uninterrupted walking path.
- Most of these are character-defining features of the district that should be preserved.
- Some sidewalk basements and coal chutes features are in disrepair.

Recommendations:

- Repair sidewalk basements and coal chutes when feasible, and restore prism glass and covers where they exist.

Above Ground (Surface) Infrastructure Components

This section focuses on above ground aspects of infrastructure, although some underground components are also described.

Main Street paving

The existing brick paving in the Historic Core was installed in 1991-1992 and reflects a historically significant feature. The brick is laid on a concrete bed but is of a custom dimension not like the original size. Periodically, the city must arrange to have a special run of replacement brick produced. They then stockpile this for use as needed. This complicates repair and replacement cycles.

Lower Main is paved in concrete. While this provides a stabile surface, it visually separates Lower Main from the Historic Core. With the proposed work on utilities, there is an opportunity to repave this segment in a way that visually

New brick pavers in Deadwood Street more closely resemble the historic pavers that were originally used on Main Street.

Deteriorated brick paving

links it with the Historic Core. This should be accomplished in a way that conveys that this is a later change and not part of the area that was paved in brick historically.

Issues:

- Portions of the modular brick paving on Main St. are in disrepair; some areas have temporary patches of other material that is out of character.
- The custom brick is more expensive than other products that are standard and which better reflect the historic brick.
- While the existing brick is somewhat durable, edges are subject to damage by snow plows.
- Lower Main is visually separated from the Historic Core by its paving material.

Recommendations:

- Replace the brick in the Historic Core with a new, standard brick paver that is in character with historic precedent.
- Stockpile the existing brick used in other areas of town where that product also is in use and changing out is not anticipated.
- Provide the ability to interpret the historic brick street alignment.
- Pave Lower Main in brick. Express this as a new event by a demarcation of where paving in the Historic Core meets that of Lower Main.

Crosswalk striping

Sidewalk and crosswalk improvements

The general approach recommended for sidewalk design is presented in Chapter 4 of this plan. A key consideration of the design is the degree to which accessibility improvements can be achieved. Reconstruction of sidewalks will directly impact reconstruction of the sidewalk vaults, which in turn impacts the available cross-slope on the sidewalk above them. Maintaining reasonable headroom in the vaults, in relation to the storefronts and in conjunction with the ties into the curb, all play into the design of an ADA compliant pedestrian system. From a design standpoint, historic preservation may dictate that the significance of the sidewalk vaults and

the location of the curb line require their conservation. This would necessitate a variable cross-slope design. The potential widening of portions of the sidewalk may provide some opportunities to improve cross-slope conditions.

While meeting accessibility standards should be achieved to the extent feasible, constraints may limit some options. The most benefit may be at intersection crossings. Improving accessibility at crossings could occur by widening the ramps and decreasing the slopes.

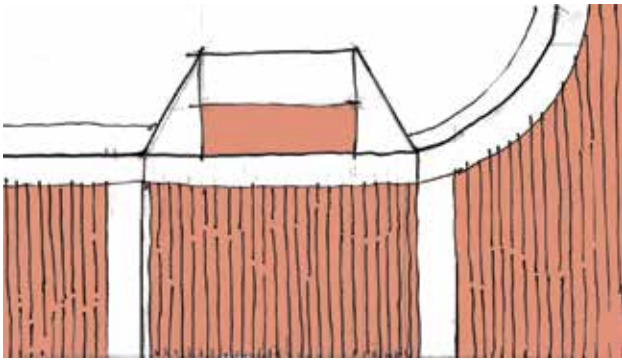
Crosswalk & sidewalk improvement and repair Issues:

- Areas of sidewalks need to be repaired and/or reconstructed. Other areas are missing sidewalks.
- Stripes at pedestrian crossings require frequent repainting.
- Ramps may not meet accessibility standards.

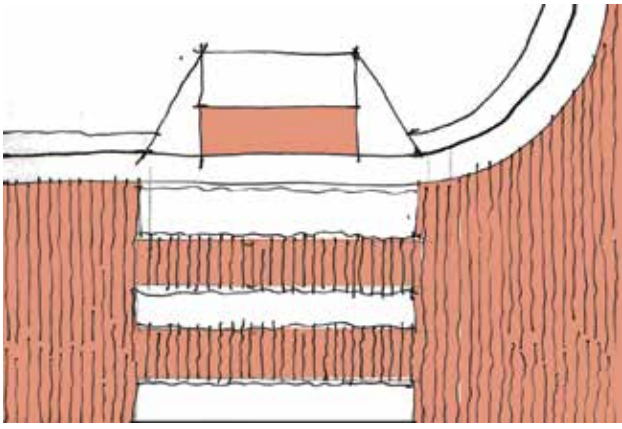
Recommendations:

- Identify crosswalks with a change in material. For example, two concrete strips on either side of the proposed brick paving pattern could be incorporated.
- Reconstruct sidewalks and ramps to the degree feasible while preserving the integrity of the historic district.
- Use durable materials.
- Consider opportunities to enhance accessibility in sidewalk improvements.
- Achieve ADA compliance at intersection crossings as feasible.
- Preserve historically significant features in sidewalks.
- Enhance pedestrian crossings. See Map #4: Design Framework.
- Enhance pedestrian crossings at Lee Street, Deadwood Street, and Pine Street along Highway 14A.
- Incorporate mid-block crossing(s) to reduce distances for crossings.

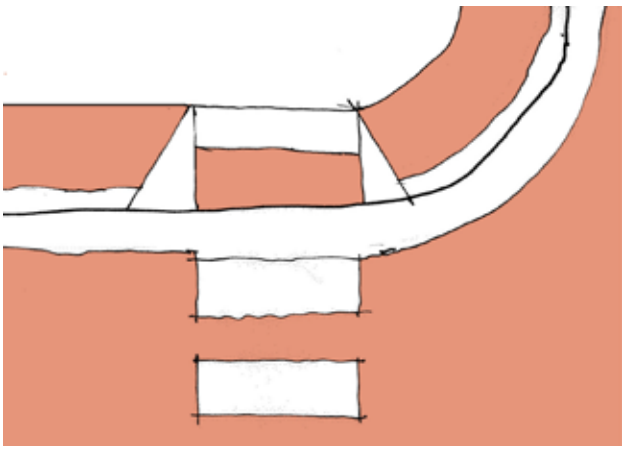
Alternative Crosswalk Concepts



Alternative 1



Alternative 2



Alternative 3

Curb cuts

Issues:

- There are many curb cuts in the project area, which disrupt pedestrian flow. Some are clearly inactive and others may be redundant.

Recommendations:

- Remove inactive and redundant curb cuts to the extent feasible.
- Identify where curb cuts can be closed along Main Street during detailed street design.

Curb condition

Issues:

- Some curbs are failing.
- Curbs are striped to regulate use, such as parking, loading and trolley stops. This striping erodes quickly and, therefore, the curbs have to be repainted annually.

Recommendations:

- Assess the condition of curbs and determine if replacement is necessary.
- Study alternative means of indicating curb-side use such as signage.

Incidental infrastructure elements:

Infrastructure includes water valves, curb boxes, domestic and FD sprinkler services, piping, fire hydrants, manholes, etc.

Issues:

- The location, number and condition of these features is not documented.

Recommendations:

- Develop an inventory of incidental infrastructure components by building on the GIS base that Ferber has already created.
- Assess the condition of these infrastructure components to determine if any need to be replaced.

CHAPTER 7

STREETSCAPE DESIGN

With an understanding that the location of curbs, the height and width of sidewalks, and the character of paving may be affected with infrastructure work, what should be the character of the resulting design? This chapter presents basic design concepts for Main Street itself, in terms of the width of sidewalks, the organization of lanes between the two curbs and the paving materials to be used. It also provides guidance for locating street furniture, streetlights and signage. It includes the three variations in street layout for consideration. They explore alternatives for increasing space for pedestrians while accommodating other key operational functions and respecting historic character. Two of the approaches would move some curbs inward, to create more room for pedestrians, although the degree to which this occurs varies in the scenarios. One would keep the location of curbs in their existing location in the plan.

The historic core, during the period with 3-globe lights

All improvements to Main Street are intended to preserve its historic significance and to help convey its character during the Period of Significance. Historic photos and other records provide the basis for understanding historic precedents.

Street And Sidewalk Design

A key variable is the width of the lanes between the curbs, which is the curb-to-curb width. Currently, this varies considerably in different segments of the street. Three conditions exist, which generally correspond to the three Character Areas:

Upper Main segment

This street cross-section exists from Pine south to Lee Street.

- The Right of Way is 55 feet wide.
- Sidewalk widths vary from 7 feet to 11 feet.
- Street widths vary from 35 feet to 39 feet.
- The sidewalk is too narrow for handling larger events.
- The opportunity to widen sidewalks is limited.
- Less space is available for street furniture and other amenities.
- A change in sidewalk elevation in front of the Franklin Hotel is a particular constraint.

Historic core segment

The cross-section exists from Lee Street south to approximately 604 Main Street, where brick paving ends.

- The Right of Way is approximately 65 feet wide.
- Sidewalk widths vary from 11 feet to 12 feet.
- Street widths vary from 42 feet to 43 feet.
- The opportunity exists to widen sidewalks moderately.

Lower Main segment

This segment runs from 604 Main Street south to the Lower Main Gateway.

- Street widths vary starting from end of brick at 43 feet and narrowing to 37 feet to 38 feet (approximate).
- Sidewalk widths vary from 5 feet to 6 feet, approximately, although some areas have sidewalks varying from 8 feet to 11 feet in width.
- Opportunities for sidewalk amenities are limited.

Alternative Street Design Concepts

Three alternative street designs may be considered, given the opportunities and constraints outlined above. Two alternatives maintain two travel lanes and include a third, flex lane. Perspective sketches illustrating basic features of these two options (Option 1: Equally Widened Sidewalks with Narrow Flex Lane and Option 2: Widened Sidewalk on One Side with Larger Flex Lane) follow on pages 76 and 78.

Both show how a potential flex lane could be established and how decorative paving could be installed. They also show places where sidewalk expansion could occur.

A third alternative maintains the existing street width; the curb line remains in the current location in plan. Some changes in the elevation of the curb could occur, however.

Utility improvements

In each of the scenarios, excavation of the street and sidewalks would occur in order to repair underground utilities.

Street re-paving

In all three scenarios, Main Street would be re-paved within the master plan area. A new brick would be used, which would more closely resemble the historic brick than the material which is currently in place in the Historic Core. Lower Main also would be paved in brick, to visually link it with the Historic Core. A special “seam” detail would define where the historic brick paving section of the Historic Core ends, to differentiate the Lower Main brick as a later alteration.

Sidewalk reconstruction

In all three scenarios, sidewalks would be re-constructed. To the extent feasible, the cross-section slope of the sidewalk would be adjusted to more closely meet ADA standards. The new sidewalks would be in broom-finished concrete, similar to that used historically.

Street furniture location

The illustrations include a few pieces of street furniture, with the intent of showing the potential location of these amenities. They are not intended to suggest specific designs for the street furniture. In general, street furniture would be positioned in the new expanded sidewalk area, leaving the existing sidewalk clear for pedestrian movement.

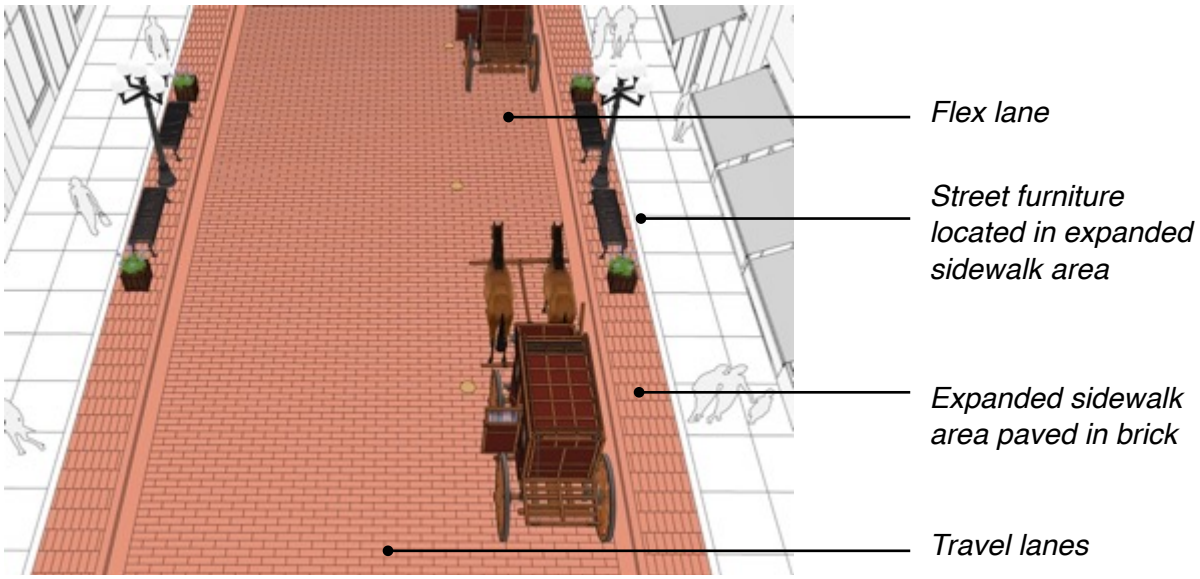
Reflecting historic character

The alternative scenarios also explore ways in which to express the historic character of the street width and its paving while accommodating functional requirements. Each indicates a way to express the location of the existing curbs and a way to convey the character of historic brick paving as it appeared during the period of significance.

Flex-lane approach

In some options, a third lane is included and is designed to accommodate a range of uses. At times, the flex lane would serve as expanded walk area for pedestrians, such as during peak event times. At other times, it could accommodate event staging, such as booths for a market day or art fair. Loading zones and trolley stops also would be located at places along the flex lane.

Option 1: Equally Widened Sidewalks With Narrow Flex Lane



Sidewalks:

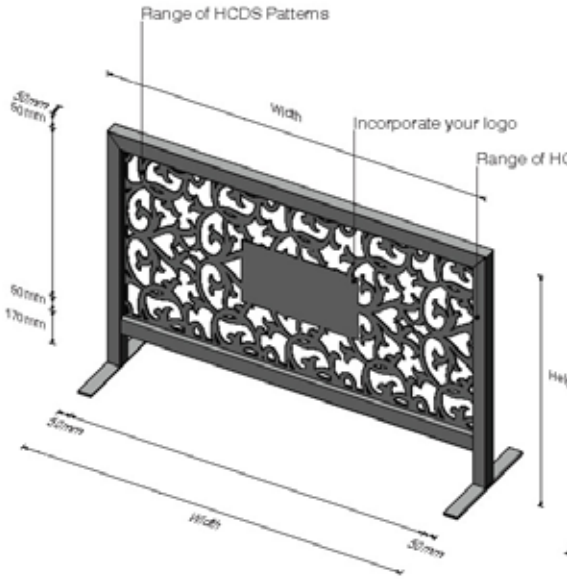
- Sidewalks are widened on both sides of the street, to equal dimensions where the ROW width permits. In some locations, where there is additional right-of-way the sidewalk, and/or lane(s) could be even wider.
- The historic curb line is delineated with a concrete strip.
- The existing sidewalk area is paved in concrete from the historic curb line to the building faces.
- The sidewalk expansion area is paved in brick in order to convey the historic width of the brick street.
- Street furniture is located in the expanded area of the sidewalk, where space allows.
- The original sidewalk area is cleared of obstructions to facilitate safe movement of pedestrians.

Travel lanes:

- Two travel lanes are provided.
- The travel lanes are paved in brick, in a color and pattern similar to that seen historically.

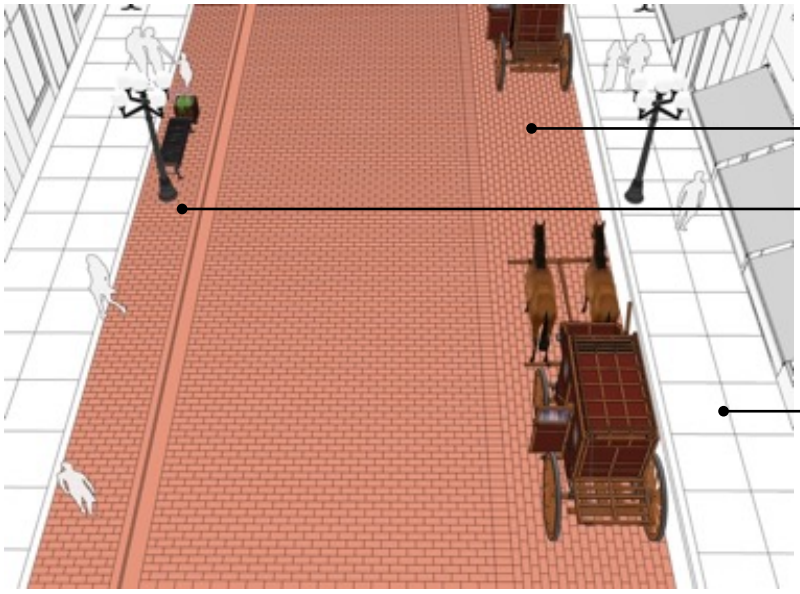
Flex lane:

- A flex lane is provided on one side of the street.
- The flex lane is paved in brick, in a color and pattern similar to that seen historically.
- A soldier course of brick defines the edge of the flex lane.
- Brass plates or similar markings could be embedded in the paving to further distinguish the flex lane from the travel lanes.
- Movable barriers also would be installed where the space is to be used by pedestrians.



Example of a moveable barrier

Option 2: Widened Sidewalk On One Side With Larger Flex Lane



Sidewalks:

- In this option, the sidewalk is widened on one side only. It is wider than in option 1. (In the illustration it is the left side.)
- Brick paving that matches the street is used in the expanded sidewalk area.
- A concrete strip conveys the location of the historic curb line.
- The sidewalk on the opposite side is reconstructed in concrete.
- Street furniture is located in the new (expansion area) part of the sidewalk. On the opposite side of the street, it is located where space allows.
- The original sidewalk area is cleared of obstructions to facilitate safe movement of pedestrians.

Travel lanes:

- Two travel lanes are provided.
- The travel lanes are paved in brick, in a color and pattern similar to that seen historically.

Flex lane:

- A flex lane is provided on one side of the street.
- The flex lane is paved in brick, in a color and pattern similar to that seen historically.
- A soldier course of brick defines the edge of the flex lane.
- Brass plates or similar markings could be embedded in the paving to further distinguish the flex lane from the travel lanes.
- Movable barriers also would be installed where the space is to be used by pedestrians.
- The width of the flex lane is generally continuous along the length of the street.

Option 3: No Widening of Sidewalks (Preferred)

Sidewalks:

- In this option, new concrete sidewalks would be constructed in the same location as the ones that exist today.
- Street furniture would be located in a manner similar to today; therefore some conflicts with pedestrians could continue.
- There would not be as many opportunities for additional street furniture.

Travel lanes:

- Two travel lanes could be defined.
- The travel lanes would be paved in brick, in a color and pattern similar to that seen historically.

Flex lane:

- A flex lane also could be defined in this option, for the portion of the street where width permits.
- It could be located on one side only, or it could vary from one side to the other, depending upon functional needs.
- The design details would be the same as those described for the preceding options.

In this option, new sidewalks would be positioned in the same location as the ones that exist today.

Street Furniture

A coordinated palette of street furniture should be used throughout the corridor. This will help to strengthen the sense of continuity for the area. Designs should build on those pieces that exist which are compatible with the historic context. Components include benches, waste receptacles, ash trays, planters, kiosks, interpretive devices, and temporary structures. The general character of typical furniture pieces is illustrated in the accompanying photographs. These are intended to illustrate the general character and are not specifications for specific products or brands.

Bench and metal strap waste receptacle

Wood slat bench

Waste receptacle and metal rail

Trolley stop sign post

Example of moveable barriers

Bollards

Potential Barriers Concepts

These sketches illustrate alternatives for heavy duty moveable features that could serve as barriers to control traffic while enhancing the setting. They may include historical markers, thematic art or plantings.

Urn ~~with flowers~~

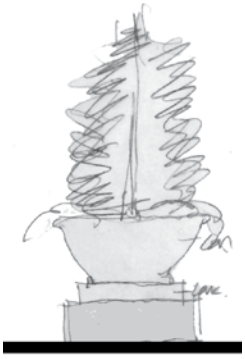
Pedestal

Colored concrete base

Urn example

~~Urn with~~ evergreen shrub

Colored concrete base



Historic precedent exists for large street furnishings that also manage traffic flow. This image is of a watering basin for horses.

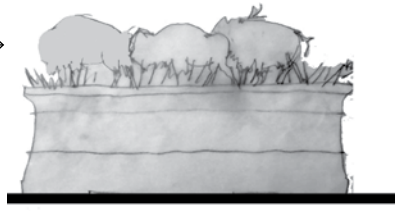
~~Thematic art~~

Natural or cast rock base

Example of rock base

~~Thematic~~ sculpture

Colored concrete base



Example of colored concrete base

Street Lights

Lighting should be a key element in the streetscape for the entire corridor. The design should build on historic precedent, but express differences in evolution of the different character areas. For this reason, globe lights, similar to those seen historically should be used. That said, the design should differ, in a subtle way, between the Historic Core and Upper and Lower Main. The light poles (standards) should be designed to incorporate power supply and to support flags and hanging planters. In other areas, such as in parking lots, a simpler design should be used, to avoid implying that these areas once had historic globe lights.

A three globe light should be used in Upper and Lower Main.

Issues:

- The existing globe light poles are composed of two different metals for the shaft and the base. There is a galvanic reaction with the two different materials which causes corrosion.
- Some light poles are sometimes hit by delivery trucks because of their close proximity to the curb.
- The existing globe lights can disperse some light into the night sky.
- Light poles in Lower Main are out of character with the historic district.

Recommendations:

- Use a five-globe fixture in the Historic Core.
- Use a three-glove fixture in Lower Main and Upper Main.
- In parking lots, use a contemporary shielded fixture in a color similar to those at the Welcome Center.
- Install light poles of materials that are more stable and can be easily maintained.
- Position light poles to minimize the potential to be struck by trucks.
- Consider globes that are designed to minimize glare into the nighttime sky.
- Include power outlets and bracket mounts for banners or flowers.

A five globe light should continue to be used in the historic core.

Precedent for accent lighting on Main

Banners, Bunting And Accent Lights Spanning Main Street

Banners are used throughout the year to advertise special events and for holidays. Seven cables span the street for this purpose, and there may be a need to accommodate more. There also is interest in having “Edison” light strings strung across the street to enhance the festive quality of the experience. Historic photos document the use of historic flag banners and exposed lights on strands. An objective is to provide the ability to use these features to enhance the visitor experience.

Issues:

- Outdoor enhancements can clutter the street and buildings.
- Banners, buntings and similar outdoor enhancements require maintenance.
- Insure clearance for vehicles, floats, etc. when providing features that span the street.
- New features and hardware should not overwhelm the historic setting.

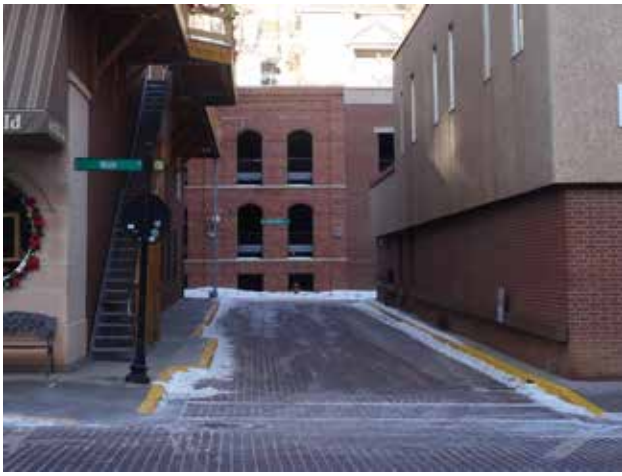
Recommendations:

- Develop a banner plan that provides guidance for their use.
- Identify appropriate locations for patriotic fan buntings at storefronts, windows and canopies.
- Develop design guidelines for installation and products.
- Where they are to be attached to historic building facades, make sure product and mounting hardware are durable and will not damage the historic building facades.
- Identify durable banners to promote events.
- Consider including mounting hardware on light poles that can accommodate planters and flags.
- Develop a plan for use of Edison lights over the street.
- Assure that the design is in keeping with historic precedent.
- Consider the use of special stanchions to support the lights, perhaps in combination with facade-mounted systems.

CHAPTER 8

SPECIAL DESIGN CONSIDERATIONS

This chapter addresses some special design considerations for specific areas associated with the Main Street corridor. These include opportunities to enhance some cross-streets with an emphasis on providing places for pedestrians and outdoor uses. Opportunities to coordinate other improvement projects, such as the highway realignment and box culvert project are also addressed.



Gold Street

Gold Street Design Concept

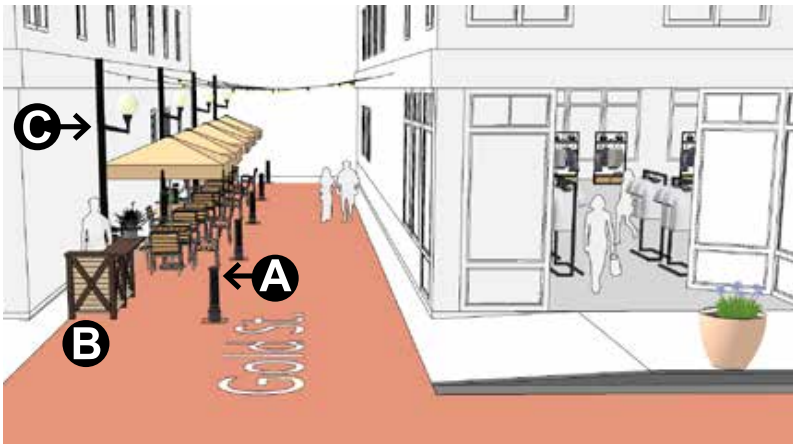
Two sketches on the following page, one a perspective view and the other a plan view, illustrate one option for enhancing Gold Street. The design concept improves Gold Street as a special outdoor use place. A walkway maintains a clear path of travel and can be used for emergency vehicles or servicing. One side of the street has outdoor dining furniture. A row of movable bollards separates the seating area from the path of travel. Tables are placed along the wall of a building and planters and lights enhance the space. These furnishings would match those in the streetscape palette for Main Street. Edison lights are strung overhead. This design removes the sidewalk and uses a curbless street section.

Lee Street Design Concept

A design concept for Lee Street on page 87 is similar to that shown for Gold Street. The width here is more constrained than at Gold and thus smaller, “bistro” tables are used. Movable planters separate the outdoor seating area from the path of travel. Edison lights are strung overhead to add sparkle to the setting.

Gold Street Design Concept

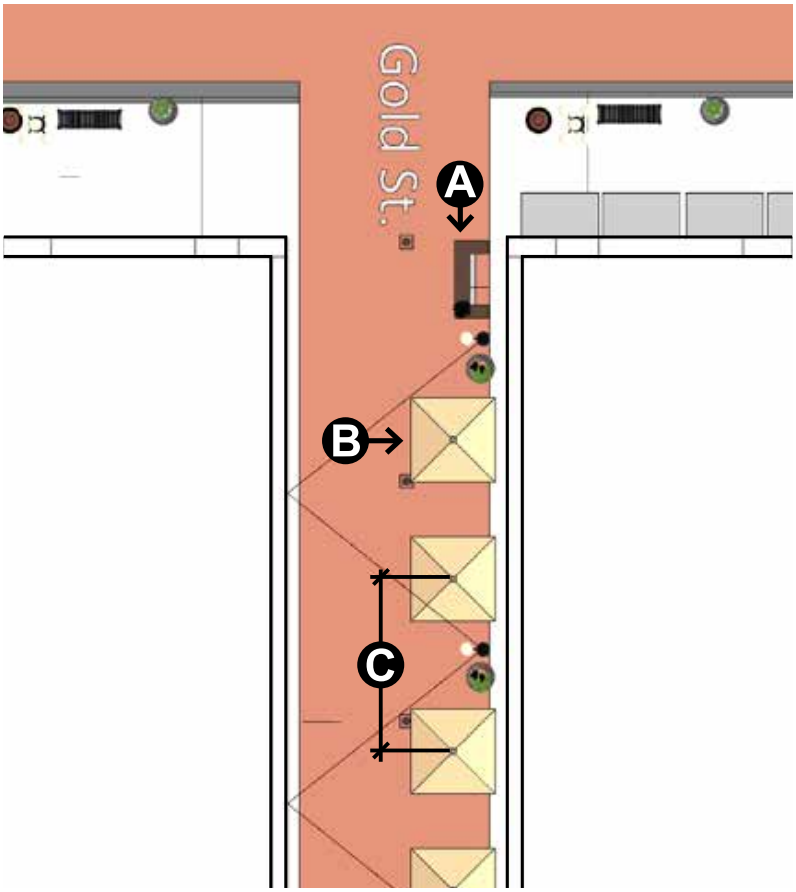
KEY	
A	Removable bollards define the walkway and seating area
B	Service area podium is located adjacent to sidewalk along Main St.
C	Fixed light poles illuminate pedestrian activity



GOLD STREET PLAN VIEW

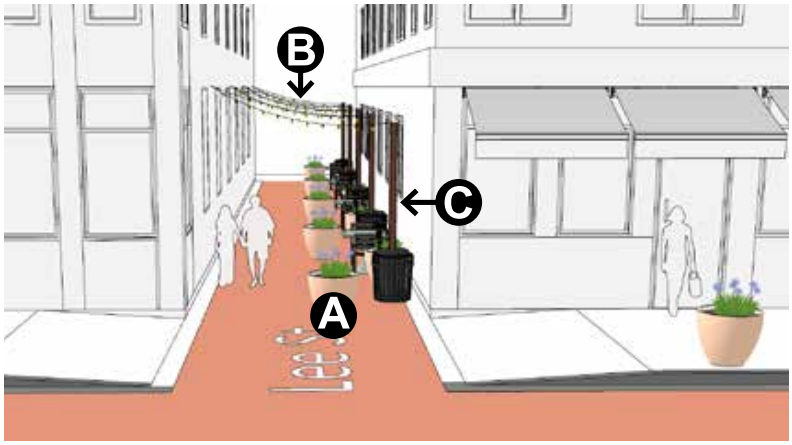
KEY	
A	Temporary food or beverage service station is visible from primary street.
B	Outdoor seating
C	Tables are located to allow for generous spacing between seats

Another option is to provide benches or a combination of benches and tables along Gold Street.



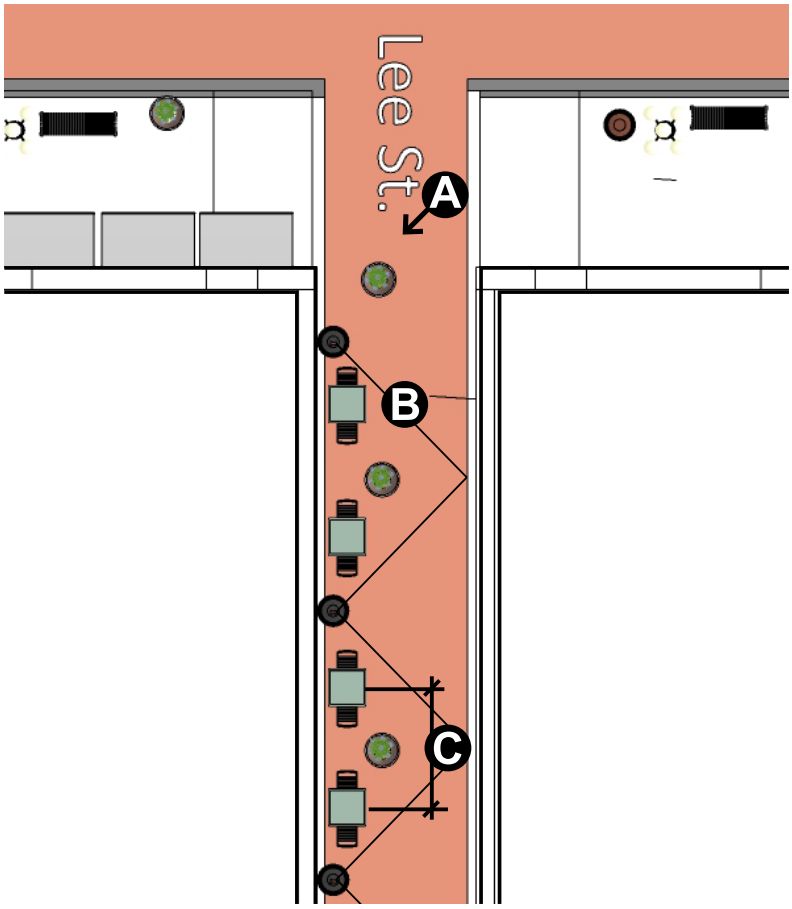
Lee Street Design Concept

KEY	
A	Planters define the walkway and somewhat enclose seating area
B	Temporary Edison Lights the lights are anchored on one side and supported by temporary poles on the other.
C	Temporary poles anchored in metal strap planters



LEE STREET PLAN VIEW

KEY	
A	Planters and street furniture visible from sidewalk
B	Outdoor seating
C	Seating located to allow for safe pedestrian circulation



Example of Edison anchor

History & Information Center Plaza

History & Information Center Plaza

The lot in front of the History & Information Center is a special opportunity for improvement. It primarily serves as a parking lot and at times as a staging area for tour buses. These are important functions, but the space could be arranged more efficiently to accommodate these uses while also providing some outdoor uses area for pedestrians. With an efficient layout for parking, the “leftover” spaces could be developed for that purpose.

Furthermore, the plaza also could be enhanced with other features that would allow the space to be better utilized for special events. A portion of it could be designed to be blocked off temporarily for a festival or exhibition, for example. It could be paved in brick, to visually connect it with Main Street. With the advent of Outlaw Square, this space should in essence be considered a companion element. Using streetscape elements that are consistent with Outlaw Square therefore should be considered.

A change in paving design could be used to express the historic location of rails at the depot.

Highway Edge Design

Planning is currently underway to make improvements to the culvert which carries Whitewood Creek along a segment under the highway that parallels Main Street in the core of downtown Deadwood. A series of alternative alignments are being considered. Each includes creating space for a parking area along the edge of the highway, as well as improved pedestrian connections from the highway to Main Street. The culvert project provides opportunities to include urban design features that respect the historic character of the National Historic Landmark while improving aesthetics and functionality for users. Landscaped edges, coordinated wayfinding systems and gateway design elements are some of the features to consider, as well as enhanced designs for functional needs such as trash and utility services.

Some basic urban design principles that relate this project to the character of Main Street should be considered as planning for the highway alignment progresses. These principles apply to all of the alternative roadway sections that are the likely candidates for selection as the preferred alternative.

The highway edge

Access to Main Street from the highway

Traffic access to Wall Street

Wall Street is a key access route to Main Street because it aligns with the entry to the downtown parking garage that lies behind buildings on the west side of Main Street. Maintaining this access route to the parking deck becomes especially important when a portion of Main Street is closed to traffic between Wall Street and Deadwood Street. This often occurs for special events. As such, Wall Street should remain in a one-way direction heading west from the highway.

Design principle:

Provide for turning movements onto Wall Street for traffic arriving from both the north and the south on the highway. This should be a direct access and not require use of the driving lane that would be provided in the proposed parking area (although crossing the parking area is expected).

Vehicular access for potential new street from the highway

An underutilized lot lies between the Celebrity Hotel and the Mineral Palace. This is an opportunity to create a new street to connect the highway with Main Street. Although no formal decisions have been made or agreements arrived at with property owners, it is important to keep this option open.

Design principle:

As design details develop for the highway, the ability to create a street here should be maintained to the extent feasible. Note that there may be a grade change to be addressed.

Whitewood Creek trail

Pedestrian access from the highway to Main Street

Pedestrians arriving from the north and who park at the Welcome Center at the end of Lower Main should be encouraged to enter the corridor at the northern gateway near the Tin Lizzie resort. However, other pedestrians may walk to Main Street from other parts of downtown or from the creek trail and thus providing safe, inviting access to Main Street in the area of the culvert project is important.

Design principle:

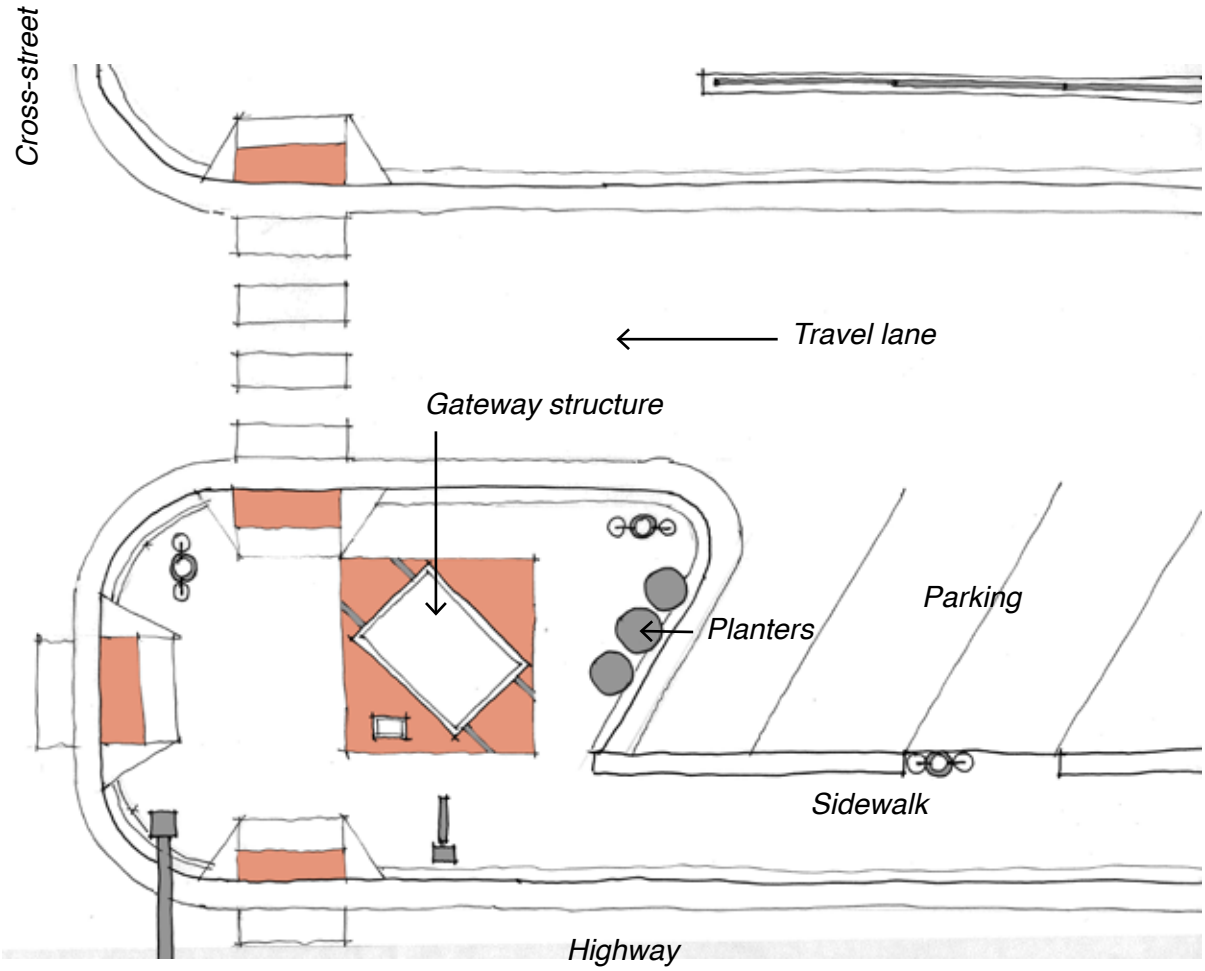
Highway crosswalks should be provided at these locations:

- Wall Street
- Deadwood Street
- Potential new street

Streetscape principles for the highway edge

This sketch illustrates how the streetscape palette for Main Street could be applied to improvements planned for the highway edge. It shows the opportunity to incorporate street furnishings and landscaping in the area between the highway and the back sides of buildings that face Main Street. The location is one where an intersection with a cross street occurs and a pedestrian connection is planned. Features include:

- An expanded pedestrian area at the crosswalk
- A gateway structure in the expanded pedestrian area
- Street lights
- Planters



The off-street parking area along the highway and service areas

Maximizing use of open space and landscaping

The arrangement of new parking areas and street crossings will yield some small bits of land that provide opportunities for a variety of amenities and service functions. These include landscaped areas, gateway features and outdoor uses, such as seating, and trolley stops. There also may be additional space adjacent to the backsides of buildings that are exposed to the highway. Some parking and service areas exist there now and some businesses use their rear access. These are places where new uses, such as outdoor dining, may be introduced. It is important that these areas be attractive and provide a preview of the character to be experienced on Main Street itself.

Design principle:

Arrange parking areas, drive lanes and street intersections to maximize opportunities for enhanced open spaces.

- Provide landscaped islands at transitions to parking bays.
- Use landscape areas as transitions between parking for auto and motorcycles.
- Consider opportunities to provide outdoor seating at back entries to buildings where open space allows.
- Consider opportunities for a trolley stop.
- Provide landscape improvements along the west side of the planned sidewalk wall.

Orientation of parking spaces

Many of the alternatives for the alignment of the highway would provide a row of parking on the west side of the roadway (the Main Street side). Because the width of the potential parking area is constrained, its layout is expected to be with diagonal parking spaces and with a one-way drive lane. As this is laid out, it is important that access be convenient for vehicles arriving from the north.

Design principle:

Diagonal parking spaces should be oriented for access by cars arriving from the north, with the drive lane in the parking area being one-way, heading south.

Protective barrier along the west-side sidewalk

The initial highway designs include a barrier along the edge of the sidewalk. It is important that this feature be attractive and visually compatible with the historic character of downtown; it is an opportunity to introduce elements of the streetscape palette that is to be used throughout Main Street.

Design principle:

Design the barrier to be coordinated with the streetscape palette for Main Street.

- Provide a textured finish to the concrete structure that adds a sense of scale. This may be a formed concrete design that emulates a board-formed pattern or stone veneer.
- Include a handrail that is consistent with other rails and fence designs intended for Main Street.
- Incorporate low-level lighting for pedestrians in the handrail.
- Provide pedestrian access points to connect with streets and walkways behind buildings on the east side of Main Street.

Coordinated streetscape palette

Site furnishings and street furniture that are installed in the parking area should be coordinated with the palette that is established for Main Street. This will provide a sense of visual continuity throughout the area and provide a preview of the character to be experienced on Main Street itself.

Design principle:

Use a coordinated palette of streetscape elements, including plantings, street furniture and lighting.

Gateway treatments

The street intersections with the highway will provide opportunities to install signature design features that identify access to Main Street. These would occur at the connections to Deadwood and Wall Streets and the potential new street. They would be secondary gateways, in comparison to that at the intersection of Lower Main and the highway. They could include artwork or other ornamental structures that are visible to nearby traffic.

Design principle:
Include gateway elements at key intersections of the highway with cross-streets. These should be compatible with the historic character and be consistent with the palette of streetscape design elements envisioned for Main Street.

Service areas

Maintaining and enhancing service to the backsides of buildings on Main Street is important. These areas should be designed to be attractive and to use space as efficiently as possible.

Design principle:
Coordinate service areas for multiple properties where feasible. Include landscape elements that are consistent with the Main Street palette. Cluster and screen dumpsters and utility boxes to the extent feasible to maximize open space for other uses and amenities.

Example of a wayfinding sign

Sign Systems

Signs that are placed in the public right-of-way should be coordinated, in terms of their location and design. These are the types of signs to consider:

Directional signs:

Directional signs are intended to guide traffic through the area and to specific sites. Vehicles, for example, are directed to parking facilities and away from street that may be closed for events. Directional signs for pedestrians guide them to trails and preferred walkways.

Issues:

- No complete inventory of directional signs exists.
- A variety of existing directional sign types exist and some detract from the historic setting.
- Events require additional signs to address the change in traffic and parking patterns. There is no orderly system of installing these.

Recommendations:

- Consolidate signs in strategic locations.
- Consider if kiosks should be used (for pedestrians); if so, develop a design concept for them.
- Study ways in which to minimize signs for wayfinding, but at the same time provide the ability to change information as events change.

Interpretive marker

Interpretive information system

Interpretive signs convey the history of the area or explain natural features and other landmarks. Many have text and graphics. Other interpretive systems make use of smart phones to link to interpretive materials. Deadwood has installed many excellent interpretive markers, but a coordinated plan does not exist.

Issues:

- A variety of interpretive opportunities exist along Main Street that are not being fully utilized.
- Creating more outdoor spaces along Main provides opportunities to install more interpretive signs.

Recommendations:

- Develop a coordinated system for heritage interpretation.
- Include policies for locating interpretive markers and related materials. For example, should plaques be located on the buildings? Consider new technologies, such as smart phones, for accessing information on the street.

Regulatory signs

Regulatory signs

These signs indicate limitations on the use of the street, including direction of travel, parking rules and where loading is permitted.

Issues:

- Many regulatory signs are mounted on the fluted shafts of the streetlights. Others are on tubular, unfinished metal. These are installed intermittently along Main Street and detract from the historic setting.
- No complete inventory of these signs exists.

Regulatory signs

Recommendations:

- Conduct an inventory of regulatory signs.
- Create a strategy for installing regulatory signs in a manner that is compatible with the historic character. This should include policies for how frequently “no parking” signs should be placed along the street.
- Develop policies for the location of trolley signs.

Special Technical Support Systems

Some special technical systems are in use and others are anticipated that would be located along Main Street. These include sound systems, security cameras and Wi-Fi Hot Spots. These systems should be unobtrusive to avoid impacting the historic character of the street.

Issues:

- A permanent sound system is needed that can be used for Shoot-outs and also for general background music, particularly for other special events.
- Cameras and sound speakers can cause visual clutter if not designed appropriately.

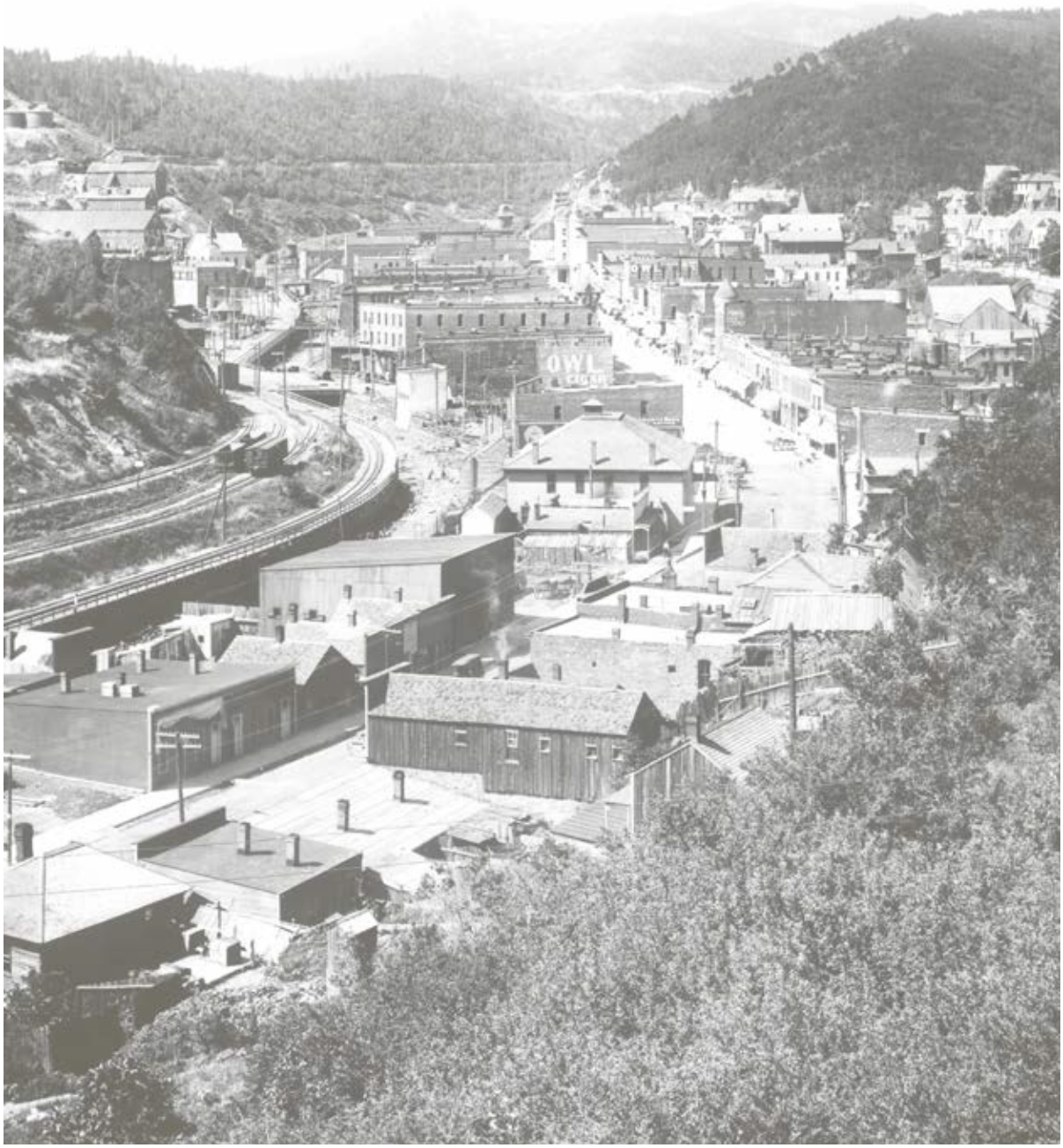
Recommendations:

- Assure that sound and video systems are visually unobtrusive. Consider opportunities to install them on special stanchions that may support Edison lights or in kiosks that would be installed at special locations along the sidewalks.
- Integrating speakers into the streetlights may also be a possibility.
- Install public Wi-Fi in the area. Consider locating equipment in the kiosks.

Developing a Plan for Heritage Interpretation

Deadwood actively works to convey the history of the area as a means of building awareness and appreciation of its historic resources and traditions and to support economic development initiatives. Enhancing the streetscape in downtown is a great opportunity to further strengthen interpretation programs. This may include adding more historical markers in the area as well as installing art and street furniture that help interpret the city's history. Other creative ways of using technology and media also may be used. Demonstrations of historic activities, re-enactments and performances also are components to engage the community in its heritage. These experiences should be coordinated in an Interpretive Plan.

The goal of heritage interpretation is to connect people to a particular place, person, event or time. An Interpretive Plan is an essential tool to achieve this goal. It can be the guiding document for deciding how best to capture and convey the ideas, stories and information that are essential to understanding the heritage of Deadwood. Interpretation should be closely linked to marketing and, like marketing, should be designed to reach a variety of targeted groups. Similarly, the Interpretive Plan is an important tool for identifying, protecting and managing resources, scenic vistas and cultural events.



CHAPTER 9

IMPLEMENTATION

Introduction

This chapter outlines the basic steps to implement the Main Street Master Plan. It includes a discussion of funding sources, the schedule for executing the improvements and a summary of opportunities to coordinate with other planning and construction projects. It proposes that the construction phase move forward as quickly as possible.

Why move forward now?

A key opportunity is to have Main Street improved in time for the city's sesquicentennial in 2026. This is an important milestone to celebrate and being able to welcome visitors to an enhanced setting would provide a very special experience. Since no construction activity should occur during that sesquicentennial year, timing work on Main Street to be completed before then is optimal.

With the numbers of visitors increasing, the need to improve the capacity to handle more pedestrian activity will continue to grow. Delaying construction to a later date could mean that a larger number of visitors would be impacted when work does occur. It also would mean further deterioration of some underground utility lines.

Coordinating with other projects

Coordinating Main Street construction with that of the upcoming box culvert project also is important. There also are other, smaller projects related to the plan that should be timed to make best use of financial and personnel resources and to minimize disruption to the street. Some of these are construction projects; others are planning and design tasks. These are some coordination opportunities:

Synchronizing with the box culvert project

Ideally, the Main Street work will happen before the culvert and highway construction. The advantage of scheduling Main Street improvements ahead of the highway project is

that the city would control when Main Street work occurs, whereas the timing of the highway project is subject to other external factors. The South Dakota Department of Transportation has tentatively scheduled that project for 2026. However, since that is the city's sesquicentennial year, and full funding of the highway project is not confirmed for a specific year, that construction date appears likely to shift to 2027 or later. Delaying the Main Street project until after the highway work could push the timing out to an unknown date.

When highway construction work does occur, it should be managed to minimize impacts on Main Street. For example, construction should be phased to avoid conflicts with major events that would draw large numbers of visitors into the city. During highway construction, traffic should not be diverted onto Main Street, which would have impacts on the street itself as well as business activity.

Note that the highway project is likely to include enhancing connections to Main Street. Constructing a new street is an example. Installing landscaping and wayfinding improvements along the highway edge as well as on cross streets also is anticipated. With the Main Street project moving forward ahead of this, the city could establish the landscape palette which the highway project should use for these connecting projects.

Other planning work:

Other related planning and design projects should be scheduled in coordination with the Main Street improvements. These are:

Wayfinding system

A plan to build upon and enhance the Wayfinding System should be developed which identifies specific locations for directional signs and related markers. This includes providing a planned sequence of information to identify parking resources, Trolley stops and pedestrian walkways and trails. While the City has many well-performing wayfinding components, a more coordinated system would further enhance functionality.

Public sound system
An improved sound system is needed to support events on Main Street, such as re-enactments, festivals and fairs. It also should be designed to provide general information as well as announcements during emergencies. Initial concepts for a public sound system were explored as part of the Main Street planning process. These ideas should be explored further in the engineering design stage.

Mini-park designs
The range of mini-parks recommended for Main Street will require more detailed planning and design. The plan suggests some locations for these amenities, but these locations may change with further study and negotiation with private property owners. Once locations are confirmed and agreements are in place, landscape design work should occur.

Utility upgrades by other agencies
In some cases, other utility companies may be impacted by the street construction, or they may see opportunities to enhance their services in coordination with it. This work should be studied during the engineering design phase.

Heritage Interpretation Plan
The Heritage Interpretation Plan should move forward during the engineering design phase, such that key interpretive devices could be installed during street work, or at least space could be provided for their installation later.

Funding Plan Implementation
Funding will come from a variety of sources:

Bond Issue
The primary funding source for the Main Street is by issuing Historic Preservation bonds. This is anticipated to cover some of these items:

- Improvements to underground utilities
- Installation of new brick paving on Main Street
- Sidewalk improvements along Main Street
- Enhancement of cross streets such as Gold and Wall
- Installation of new (replica) street lights
- Preservation of utility devices, including man-hole covers and storm water grates

- Restoration of vaults and their covers
- Installation of interpretive devices in mini-parks and along the sidewalks
- Streetscape furnishings
- Street closure/fencing devices

South Dakota Department of Transportation

As a part of the box culvert work, improvements will be made to enhance pedestrian and auto access to Main Street from the highway. This should include landscaping and wayfinding features. It also may include reconstructing some parking areas behind buildings. Providing a better connection between the highway and Main Street, with a new street, also should be part of the highway project.

Private Sector Funding

Property owners may fund some work. For example, the plan recommends landscaping the street edges of surface parking lots and constructing some mini-parks on private land. The City may partner in these projects, but the private sector is expected to take this opportunity to undertake some of this work.

Other funding sources

Some of the projects proposed in the Main Street plan may be funded by grants. Transportation alternatives grants or Community Development Block Grants (CDBG) may be potential sources.

Minimizing Impacts During Construction

With a project of this size, it is critical to minimize disruptions that occur during construction. This requires careful phasing to assure that essential services and access are maintained and that key events can continue. It also means that the community must be well informed throughout the process.

Construction Phasing Plan

A phasing plan should be developed that permits access to be maintained and key utilities to remain in service. It should identify periods in which no construction would occur, such as during major events on the street, and it should identify months in which major construction work could occur

and those months where less disruptive construction could continue. Construction is anticipated to span two construction seasons with work continuing through winter months. Technologies applied in Winter Cities should be considered. These include using temporary enclosures over segments of the street construction work. The phasing plan should be crafted during the engineering design process with public input.

A temporary enclosure system is one method to extend construction activity into winter season.

Public Information Campaign During Construction

To ensure that public information reaches Deadwood residents, businesses and visitors during the construction process, a central point of information is necessary where all updates, issues, and general information are disseminated. A public information campaign should be planned, which would be managed by a public information officer. That role may be included in the engineering contract.

A multi-pronged approach should reach all segments of the community. These are some recommendations:

Public Meetings: These meetings would be held monthly with members of the construction team and city officials. These meetings create opportunities for all concerned to get questions answered and to address any complaints in a timely manner. This is a time to gather additional addresses and preferred methods of contact for any written communication.

Hotline: This should provide information about the status of construction and identify the areas that will be affected that day. It should be updated daily. Also, a menu option to leave a message should be provided. Aim for a 24-hour turnaround response to questions.

Weekly Bulletins: For businesses, these bulletins should be hand delivered. This goes a long way to establish good customer service. These bulletins may also be mailed or emailed to residents.

Chamber of Commerce/Convention and Visitors Bureau: Regular communication is critical here. Given the number of large-scale events that Deadwood hosts, these construction impacts can make or break an event.

Social Media: Identify what channels will be used to disseminate information. The current Deadwood Facebook pages are done well. Incorporating construction updates to these pages will go a long way to get information out, especially to tourists. A separate Facebook page that is updated regularly on construction updates will also be helpful. Identify local news channels and local newspapers. Establish relationships with the reporters from both, as well as those in Rapid City.

Project Management

Assuring that all aspects of the project are executed and on time is essential. For a project of this size, a Project Manager should be in place. This may be a dedicated staff position, but may more easily be a role for the engineering team.

Implementation Schedule

A two-year construction schedule is anticipated. Within that time period, construction phasing should be planned to minimize impacts on peak visitor times. This means that a substantial amount of construction should be scheduled to occur during wintertime. Given the success of the two-season construction approach used during the Outlaw Square project it is within reason to assume a similar method could be used. Maintaining pedestrian flow and keeping water services operating will be the heaviest drivers in construction phasing.

There are three general scheduling components to the implementation schedule:

Adopting the plan

This includes the public review process and its formal adoption by the City Commission.

Preparing for construction

This includes developing construction documents, securing agreements with some property owners and confirming funding for the project.

Constructing the improvements

This includes the physical construction work as well as management of construction to minimize impacts on the public, businesses and property owners.

Project Timeline

These are the integrated steps for implementation. A step-by-step list follows with suggested dates.

1. Publish the Adoption Draft of the plan.

This provides an opportunity for review and comment by the public as well as other commissions and agencies.

2. Receive comments from SHPO on Main Street Plan.

The State Historic Preservation Office will comment on the effects of the work on the National Historic Landmark.

3. The Planning and Zoning Commission recommends adoption of the plan.

This could occur in a joint study session with the City Commission and the Historic Preservation Commission.

4. The City Commission adopts the plan.

This would include authorizing city staff to work with the engineering team to refine the scope of work and project schedule.

5. The scope of work is established with the engineering team.

This would include retaining sub-consultants such as electrical, structural and geotechnical engineers as well as landscape architects.

6. The City authorizes the detailed design work by the engineering team.

7. Negotiate with private property owners.

Ideally, the City would reach agreements with property owners where construction of small mini-parks is recommended. Construction easement agreements also would be arranged at this time. Negotiations by SDDOT for a potential new street connecting the highway with Main Street also would occur.

8. Follow-up field investigations occur.

This includes field surveys to confirm location of utilities, geotechnical analysis and confirmation of grades.

9. The 50% design stage is completed.
This provides sufficient information to identify the location of curbs and utilities as well as landscape and surface improvements. Ideally, more detailed information about the design of the highway alignment would be available by this time, such that it can be more closely coordinated. This would include a phasing plan that indicates how areas under construction would be managed to maintain access during the project. It also would indicate how work would be staged to minimize conflicts with peak visitor use periods on Main Street.

10. A construction cost estimate is updated.
This is a check-point to assure the scope of work is consistent with the funds available.

11. Construction documents are available for review.

12. Design development phase is completed.

13. Construction documents are completed.
At this point, the project is put out to construction contractors for bid.

14. Construction contract is let.

15. Construction begins.
Construction would focus on “off-seasons” in order to avoid disrupting peak visitor periods. Some work that is less disruptive could occur, however, during summer months. Construction is to be phased over two years. Strategies for constructing during winter months exist that could be applied here. Using specially designed tent structures is an example.

16. Construction is completed.

17. The City celebrates its 150th anniversary with an enhanced Main Street!

TIMELINE TO COMPLETION

August 26, 2021

Step 1	**Sept. 2021**	**Publish the Adoption draft of the plan.**
Step 2	**Oct. 2021**	**Receive comments from SHPO on Main Street Plan.**
Step 3	**Oct. 2021**	**Planning and Zoning Commission recommends adoption of the plan.**
Step 4	**Nov. 2021**	**City Commission adopts the plan.**
Step 5	**Dec. 2021**	**Scope of work is established with engineering team.**
Step 6	**Jan. 2022**	**City authorizes the detailed design work.**
Step 7	**Jan. - April 2022**	**Negotiate with private property owners for new street, mini-parks and construction easements.**
Step 8	**March - April 2022**	**Follow-up field investigations occur.**
Step 9	**July 2022**	**50% design stage is completed.**
Step 10	**July 2022**	**Construction cost estimate is updated.**
Step 11	**Oct. 2022**	**Construction documents available for review.**
Step 12	**Oct. 2022**	**Design development phase is completed.**
Step 13	**Jan. 2023**	**Construction documents are completed.**
Step 14	**March 2023**	**Construction contract is let.**
Step 15	**April 2023**	**Construction begins.**
Step 16	**May 2025**	**Construction is completed.**
Step 17	**2026**	**Celebrate 150th anniversary!**