Opportunities to improve downtown Boise's vital corridor

By use of identity elements, wayfinding, public artwork, green energy, green space, pedestrian safety improvements, traffic calming, streetscape design, bicycle access and public space.



modus

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8th Street Concept Plan INTRODUCTION



INTRODUCTION

CCDC's objective in the development of the 8th Street Concept Plan is to determine locations for potential projects and enhancements along the 8th Street axis. 8th Street is the north/south spine of downtown. The scope includes 8th Street from the Boise River to State Street with consideration to Fulton Street from 9th Street to Capitol Boulevard.

The 8th Street Concept Plan is schematic in nature and designed to be used as an idea and planning tool for future investment in the infrastructure of 8th Street. CCDC and other development individuals and groups may use this plan to strategize future funding of areas and/or projects. This plan should be used in conjunction with previous plans including: Central District Master Plan, Boise R/UDAT, Old Boise – Eastside Master Plan, River Street – Myrtle Street Master Plan, Westside District – Framework Master Plan, Pioneer Corridor Plan, 8th Street Concept Plan, Downtown Mobility Study, Communities in Motion, Blueprint Boise, CCDC Sustainable Development Policy, Downtown Arts & Culture Plan and ACHD Roadways to Bikeways.



POTENTIAL PARTNERSHIPS

- Capital City Development Corporation (CCDC)
- Ada County Highway District (ACHD)
- Idaho Transportation Department (ITD)
- City of Boise

Planning & Development Public Works Parks & Recreation

Department of Arts & History

- Idaho Department of Water Resources
- West Downtown Neighborhood
 Association
- Downtown Neighborhood Association
- Idaho Commission on the Arts
- Preservation Idaho
- Idaho Humanities Council
- Idaho Smart Growth
- Local Universities

- Local & State Agencies & Organizations
- Idaho Botanical Gardens
- National Agencies & Organizations
- National Endowment for Arts
- Complete Streets
- Environmental Protection Agency
- EPA's Greening America's Capitals
 Program

8th Street Concept Plan SITE CONTEXT

RIVER STREET • 8TH STREET • JEFFERSON STREET







GEOGRAPHIC LOCATION

8th Street from River to Bannock streets is the north/south axis through the core of downtown Boise. This section of 8th Street runs through five established districts:

The Cultural District - The Boise River to Myrtle Street

8th Street Marketplace (BoDo) - Myrtle Street to Front Street

The Grove Plaza - Front Street to Main Street

Central Downtown - Main Street to Bannock Street

The Capitol District - Bannock Street through State Street

OURCE: MODUS ARCHITECTURE

8th Street Concept Plan 8th Street Concept plan

CONCEPT

The 8th Street Concept Plan is a basemap depicting opportunities along the 8th Street corridor from State Street to the Boise River. These opportunities include: identity elements, wayfinding, public artwork, green energy, green space, pedestrian safety improvements, traffic calming, streetscape design, bicycle access and public space. Sketches depict suggested ideas to expand these opportunities to improve this vital corridor in the heart of downtown Boise. The 8th Street corridor passes through and joins four distinct districts in downtown Boise. The center of each district is defined by a "node" created by the intersection of pedestrian and/or vehicular traffic. The nodes act as a nexus, points of energy from which the urban landscape emanates. In combination, the nodes and the districts that grow outward from them act as organizing elements for the creation of public, urban space. A pattern then emerges. When a unifying concept is overlaid on this pattern it can help create a sense of place and strengthens the downtown core.



See Appendix for Opinion of Probable Cost Analysis



See Appendix for Opinion of Probable Cost Analysis

KEY PROJECTS





KEY PROJECTS:

Cultural District Plazas Front and Myrtle Streets Grove Pocket Park Whole Park and Living Wall Pedestrian Safety and the Market Post Office Plaza

KEY PROJECTS





8th Street Concept Plan key projects

PLAZAS • BICYCLE LANES • PEDESTRIAN SAFETY • POCKET PARKS



CULTURAL DISTRICT PLAZAS

The three blocks of 8th Street between Broad Street and River Street are an opportunity to energize the Cultural District. The concept is to develop those three blocks into a center for the Cultural District with a large plaza for outdoor events.

A 26 foot wide plaza can be accommodated by limiting the traffic to a single one-way lane with parallel parking on one side and two bicycle lanes. The bicycle lanes have one lane traveling with traffic and a contra-lane that travels against traffic. Sidewalks are designed to allow for compact patio dining, and the larger plaza can host even more patio dining. Bioswales and double rows of trees introduce vegetation to the streetscape. The plazas may also include water features, unique paving designs, artist designed street furniture and public art installations.

MODUS ARCHITEC





Narrowing the current two-way street to a one-way street in the Cultural District enables a large 26 foot wide public plaza to be created from the newly gained space. This public plaza could house street vendors, provide patio dining, and host cultural events. The proposed one-way travel direction would connect with BoDo's current one-way travel direction.



8th Street Concept Plan **Key projects**

PLAZAS • BICYCLE LANES • PEDESTRIAN SAFETY • POCKET PARKS



CULTURAL DISTRICT EXISTING CONDITIONS AND POTENTIAL OPTIONS

Current conditions at the three blocks of 8th Street between Broad Street and River Street exhibit narrow sidewalks, parallel parking and two-lanes of traffic. One block has a median in-between the travel lanes. Bicycle lanes are missing from this area. The narrow sidewalks limit the opportunity for patio dining. The road dominates the streetscape.

Potential options to remedy these issues include a streetscape scene similar to other downtown blocks that include narrower two-lanes of traffic without a median (see Potential Condition #1, page 13)

or limiting traffic to a single lane one-way of traffic (see Potential Condition #2, page 13.) By reducing the street traffic width, this gained space is an opportunity to create public plaza space. Potential Condition #2 with one-way traffic would create the largest, more successful public plaza.

A public plaza would become a place for the general public to enjoy cultural events, for street vendors to set up carts, and patio diners to enjoy the comfortable Idaho weather. This could make the Cultural District a lively and vibrant destination.



Existing Condition with Median

KEY PROJECTS

PLAZAS • BICYCLE LANES • PEDESTRIAN SAFETY • POCKET PARKS



Potential Condition #1 - Two-way Traffic with small patios



Potential Condition #2 - One-way with large public plaza

8th Street Concept Plan **Key projects**

PLAZAS • BICYCLE LANES • PEDESTRIAN SAFETY • POCKET PARKS



EXISTING CONDITIONS AT FRONT AND MYRTLE STREETS

Front Street and Myrtle Street currently serve as principal arterial streets to funnel vehicular traffic in and out of downtown. The five lanes of traffic on these streets create barriers to the flow of pedestrian traffic on 8th Street due to the volume and speed of vehicles and the width of the street.



In 1992, the **Broadway-Chinden Connector** was completed. Front and Myrtle streets were each expanded to five lanes of one-way traffic in each direction. This reduced the traffic load on Idaho and Main streets by routing traffic outside the central business district.

Prior to this, in the late 1890s, a train station was located on Front Street between 9th and 10th Streets. The four square blocks encircled by Capitol Boulevard, 9th Street, Front Street and Myrtle Street served as the rail yards.

KEY PROJECTS

PLAZAS • BICYCLE LANES • PEDESTRIAN SAFETY • POCKET PARKS



PARKING AND BICYCLE LANE POTENTIAL AT FRONT AND MYRTLE STREET

The five lanes of traffic that define Front Street and Myrtle Street create barriers to the flow of pedestrian traffic on 8th Street due to the volume and speed of vehicles and the width of the roads. A concept to retain the existing five traffic lanes during peak travel hours with the addition of a full-time bike lane and parking during off-peak hours could be implemented.

For example, five lanes could be dedicated to vehicular traffic from 7am to 9am and 3pm to 7pm. During the time of non-peak traffic volume, parallel parking would be allowed and vehicular traffic would be reduced to four lanes from 9am to 3pm and 7pm until 7am. The new bicycle lanes are accommodated by narrowing the current width of each traffic lane. Narrower traffic lanes have a tendency to slow vehicular traffic thus increasing pedestrian safety. Roadside parking during non-peak traffic hours improves pedestrian safety at adjacent sidewalks. This opportunity to increase pedestrian safety can be accommodated cosmetically by repainting the pavement markings and installing signage.

KEY PROJECTS

PLAZAS • BICYCLE LANES • PEDESTRIAN SAFETY • POCKET PARKS



GROVE POCKET PARK

The existing patch of lawn presents the opportunity to create a small park referred to as a "Pocket Park." Built-in seating defines the raised planting beds that provide an inviting atmosphere for people to rest as they meander along 8th Street.

Vegetation provides texture, color and shade. Variation in paving pattern and materials adds interest to the space. Adjacent building walls that define the space could be used for the display of public art.



KEY PROJECTS

PLAZAS • BICYCLE LANES • PEDESTRIAN SAFETY • POCKET PARKS



WHOLE PARK AT 8th AND MAIN STREETS

The northwest corner of 8th and Main streets has a troubled history in terms of development. Currently, it is referred to as "Boise's Hole" due to the incomplete 25-story proposed Boise Tower. With a positive twist, the 8th Street Concept Plan proposes "Whole Park" for the location. The Concept Plan envisions reclaiming part or all of the space to develop a park for the general public to enjoy. This park could be simply a landscaped place to relax and enjoy a nice day, or also provide temporary or permanent space for street vendors to set up shop. The Capital City Public Market resided at this location in 1996. The Market could potentially become part of this space again.

LIVING WALL – GREENING THE GROVE

Whether or not Whole Park becomes a reality, a living wall at this site would be a great asset to the area. Imagine a vertical garden with luscious green vegetation, colorful flowers and various textures. A living wall is simple to install and easy to relocate if needed. Living walls can be a few feet high or can scale the entire facade of most of Boise's downtown buildings.

The vines could grow on the existing mural wall, against the blank wall of the Boise City National Bank Building (now known as the 805 Idaho Building) or against the parking garage depending on how the space is developed. See page 29, Living Walls.

8th Street Concept Plan key projects



PEDESTRIAN SAFETY AT INTERSECTIONS AND ART

The intersections along the 8th Street corridor have different conditions that will require individual solutions for increasing pedestrian safety, wayfinding and traffic calming. The goal is to have pedestrians safely traverse the 8th Street corridor and for vehicular traffic to intersect this corridor with minimal increase in congestion.

Through the integration of traffic calming, pedestrian control devices, and artwork, intersections have the potential to provide a safe path for pedestrians, an efficient path for vehicular traffic, and an opportunity for art installations to begin to define places and nodes.

PLAN A INTERSECTION



Plan A includes minimal changes to the street and sidewalk conditions.

These elements may include:

- Curbs and strategically located bulb-outs to reduce travel distance
- Defining crosswalks and intersections through change in texture and color
- Change in road surface materials to alert and slow vehicular traffic
- Strategically located art installations
- Reduce vehicular travel lane widths to slow traffic
- Installation of pedestrian signals that countdown and/or incorporate an audio element

PLAN B INTERSECTION

Plan B includes bulb-outs or widening of sidewalks and raised curbs to help physically define pedestrian and vehicular space.

KEY PROJECTS

PLAZAS • BICYCLE LANES • PEDESTRIAN SAFETY • POCKET PARKS





CAPITAL CITY PUBLIC MARKET PEDESTRIAN SAFETY

Pedestrian safety is a primary concern at the intersection of 8th and Main streets during the Capital City Public Market days. Currently pedestrians casually cross Main Street with minimal attention being given to oncoming Main Street traffic.

A physical barrier, such as a gate, would increase pedestrian safety at this intersection. On market days, the gate would close to create a partial barrier between 8th and Main Streets. This would force pedestrians to funnel around the gate to the crosswalks. The gate would remain in an open position during non-market days. This gate could have a dual purpose – it could be commissioned as public art and operate with an alternative energy source. This gate could "announce" the Capital City Public Market and add to the character of the immediate area.

Installation of similar elements at the other market entry intersections could also be introduced to increase pedestrian safety and advertise the market on non-market days.

8th Street Concept Plan key projects

PLAZAS • BICYCLE LANES • PEDESTRIAN SAFETY • POCKET PARKS



POST OFFICE PLAZA

The sidewalk frontage at the downtown Post Office provides an opportunity for a public plaza space. Transforming a sidewalk into a public gathering space, through the use of seating and landscaping elements, encourages people to use it as a place to meet and relax. Water elements help to cool the space on hot summer days and may be designed as a place for children to play. Vegetation provides texture, color and shade. Variation in paving pattern and materials adds interest to the space. An art installation may act as a focal point of the plaza.



8th Street Concept Plan Elements



ELEMENTS: Smaller components that make up the streetscape.

Green Infrastructure Elements (pages 22-29)

- Bioswales
- Permeable Pavement
- Street Trees
- Alternative Fuel Vehicle Charge Stations and Parking
- Green Roofs
- Living Walls

Public Art Elements (pages 30-34)

- Major Art Installations
- Events and Culture
- Murals
- Paving Patterns at Crosswalks and Intersections
- Water Features

Mobility Elements (pages 35-41)

- Automobile Parking
- Bicycle Lanes
- Bicycle Parking
- Curb Bulb-Outs
- High Visibility Crosswalks
- Gateways
- Wayfinding
- Street Furnishings



Objective:

Green Infrastructure

Bring green landscaping to hard surfaced 8th Street

Soften streetscape Reduce stormwater runoff

Benefits:

Reduces stormwater runoff

Reduces demand and maintenance on stormwater drainage

Naturally filters water before it reaches the water table or Boise River

Introduces vegetation to the urban landscape

Cooling effect on a typically harsh urban environment

Safety barrier from traffic for the pedestrian

Application:

Reconfigure existing tree and grates to function as a bioswale Locate at sidewalks near street edge

Locate at bulb-outs Locate at plazas

Potential Partners:

CCDC ACHD ITD City of Boise Public Works City of Boise Parks & Recreation DBA Property Owners

Maintenance:

Sediment removal Weeding Leaf removal Occasional supplemental irrigation during hot spells

Opinion of Probable Cost:

Planter Bioswale \$125/sf Street Bioswale \$36/sf Curb-Extension Bioswale \$36/sf

18'x4' Planter Bioswale = \$9,000 40'x7' Curb-Extension Bioswale = \$10,000

ELEMENTS



BIOSWALES

A bioswale is a vegetated facility that manages street runoff produced by precipitation. The vegetation and soils of the bioswale remove pollutants from the surface water runoff before entering the drainage system, groundwater or river. Bioswales may allow water to naturally filter to the ground water table or filter through the plants and top soils to a drain pipe connected to the river. A combination of infiltration and flow-through planters will most likely be required to accommodate different applications. Vegetation within the bioswale is selected based on low maintenance and local climate. Vegetation for Boise bioswales would include drought tolerant plants appropriate to our semi-arid climate.



MAINTENANCE

The first two years will require additional maintenance to establish the vegetation, therefore additional irrigation will be required. Also during extreme hot and dry weeks of the summer additional irrigation may be needed. Weeding, sediment, leaf and debris removal may occur at a quarterly basis. Much of the maintenance is similar to typical landscaped bed maintenance. Some cities have found that the maintenance required by bioswales is balanced by the reduction in stormwater drain maintenance and improvements.

BIOSWALES • TREES • LIVING WALL • GREEN ROOF

"Green Infrastructure is perhaps even more relevant in arid and semi-arid climates." -EPA

An urban bioswale is typically located in the public right-of-way and may be managed by one of many agencies or groups. Bioswales in an urban environment are designed to accommodate vehicles and pedestrians. An urban bioswale may be designed in multiple ways and the ultimate design should reflect the existing conditions, opportunities for improvement and the character and use of an area. In an urban setting a bioswale will typically include a curb. Most often they will be 3-7 feet wide and have a ponding depth of 6-9 inches. The curbs have curb cuts that may be covered with metal grates to allow for pedestrian passage.

For 8th Street three major types of urban bioswales are proposed: planter bioswale, a street bioswale, and a curb-extension bioswale.



Curb-Extension Bioswale

Planter Bioswale

Planter Bioswale

Planter Bioswale

PROPERTY OWNERS

The installation and maintenance of urban bioswales has encouraged cities to evaluate their current policies and standards for street improvements, responsibilities of property owners and multiple municipal entities. Cities have coordinated the installation and maintenance with all stakeholders. A given bioswale may include co-sharing of responsibility. Some cities have the Parks & Recreation manage and maintain the vegetation in the bioswales with nearby property owners responsible to provide additional irrigation during dry spells. The cost of the bioswales is typically paid for by the city and the developer of the nearby property. Local stormwater management has calculated cost savings in the reduction of demand on the storm drainage system and the reduction in debris that often clogs the stormwater drainage.

8th Street Concept Plan ELEMENTS

BIOSWALES • TREES • LIVING WALL • GREEN ROOF

Planter Bioswale

A planter bioswale is located between a curb and sidewalk in a narrow street planter that typically has vertical concrete sides. These planters are typically 3 to 4 feet wide. Existing street trees may be accommodated in planter bioswales. The planter bioswale may be located 3 feet from the curb to allow for step-out space from a parked vehicle. Grates cover the curb inlets to allow pedestrians to navigate around the planter. A small curb may be included on the sidewalk side of the planter to prevent pedestrians from trampling the vegetation.

Street Bioswale

A street bioswale is wider than a planter swale and has sides that slope. This may be located between a sidewalk and a street with or without a curb at the street side. This may be in the form of a median bioswale as well.

Curb-Extension Bioswale

A less expensive bioswale application that may be added to the outside of an existing curb is a curbextension. These are relatively simple to add to an existing sidewalk. This application works great on residential streets. This extension bumps out into the existing street. The curb-extensions are typically 4 to 7 feet wide and have a ponding depth of 6 inches. This type of bioswale can serve to neck-down the street mid-block or at end-block. End-block locations help to slow traffic at intersections and increase visibility for pedestrians crossing the road. **Planter Bioswale**



Curb-Extension Bioswale

BIOSWALE TYPES:

Planter Bioswale Street Bioswale Curb-Extension Bioswale <u>Raised Median</u> Bioswale

NATIONWIDE SUPPORT

The "Greening America's Capitals" project of the Partnership for Sustainable Communities coordinated through the Environmental Protection Agency (EPA), the US Department of Housing and Urban Development (HUD) and the US Department of Transportation (DOT) is helping state capitals to develop an implementation plan for green buildings and green infrastructure. Urban bioswales are gaining popularity across the country through this program. Urban bioswales are also being implemented in arid and semi-arid climates such as Tucson and Phoenix, AZ. www.epa.gov/smartgrowth/greencapitals.htm

ELEMENTS

BIOSWALES • TREES • LIVING WALL • GREEN



PERMEABLE PAVEMENT

The purpose of permeable pavement is to capture stormwater and allow it to seep into the ground, thus recharging the groundwater, reducing stormwater runoff and meeting the US Environmental Protection Agency stormwater regulations. This technology aids in the reduction or elimination of retention ponds, swales and other stormwater management devices. Some cities have allowed stormwater retention to be shared between nearby properties and on-street permeable pavement parking or nearby parking lots. Permeable pavement comes in many forms including interlocking permeable pavers, pervious concrete, and porous asphalt. Traditional pavers with permeable joints also function as permeable pavement, although they are not as effective.

Permeable pavers and pervious concrete offer a range of colors and opportunities for design. They also reduce the heat island effect by producing less heat than the most commonly used road surface, asphalt. Permeable pavers offer the timeless aesthetic with a sustainable solution, and may also include recycled content.

Permeable pavers that actually allow water to filter through the paver are currently available from a local Idaho company. This permeable paver looks and functions like pervious concrete. Freeze-thaw is not an issue, microorganisms biodegrade oils from vehicles, the surface does not get slippery when wet and it does not collect pools of water that form into ice.

Pavers with Permeable Joints at Parallel Parking Spaces

IMPLEMENTATION

On-street parallel parking areas are ideal locations for permeable pavement. The parking areas transform from a heat island that transfers stormwater runoff to other areas into a stormwater filtration system that allows the water to return to the ground water table. With budget constraints in mind, permeable pavement might be installed in a rhythmic pattern along a block, at special parking areas, or at every other block. And, the parking lines could potentially be designed into the paving pattern. Bike lanes alongside the permeable pavement parking may be installed as a different color to clearly designate the lane which eliminates the need for routine re-painting. A long-term cost analysis evaluating the initial installation, maintenance, elimination in paint maintenance, expected lifespan of the material as installed and the benefits of reducing stormwater runoff and filtration should be investigated to determine the potential savings of installing a pervious pavement system in lieu of standard asphalt.

Objective:

Green Infrastructure Reduce stormwater runoff

Define parking spaces

Define bicycle lanes

Benefits:

Reduces stormwater runoff

Reduces demand and maintenance on stormwater drainage

Naturally filters water before it reaches the water table or Boise River

Microorganisms consume vehicle oils from runoff

Defines parking and bicycle areas through pattern and color variation, no paint striping needed

Non-slippery surface when wet

Application:

On-street parallel parking spaces

On-street reverse angle parking

Bike lanes

Curb Bulb-Outs

Crosswalks

Intersections

Plazas

Potential Partners: CCDC ACHD

ITD

City of Boise Public Works

City of Boise Department of Arts and History

Property Owners

Maintenance:

Street vacuuming

Opinion of Probable Cost:

Permeable Pavers PERMEABILITY LEAST MOST

\$7.00-\$8.00/sf

Pervious Concrete \$6.00/sf

Pavers with permeable joints \$12.00/sf

Compare to: Asphalt \$4.00/sf

Concrete \$6.00/sf

Objective:

Green Infrastructure Soften streetscape

Benefits:

Beautify 8th Street with lush tree canopy

Provide shade

Lower summer temperature

Increase pedestrian use

Increase pedestrian safety

Application:

Add trees to southern half of 8th Street

Trees planted at sidewalks in bioswales

Varied class trees planted at bulb-outs Varied class trees planted in public

spaces and private plazas

Potential Partners:

CCDC ACHD ITD City of Boise Public Works City of Boise Community Forestry DBA Property Owners

Maintenance:

Irrigation Pruning, Limbing Leaf removal

Opinion of Probable Cost:

\$4,000/Tree Installation includes tree well, grate and cage

ELEMENTS

BIOSWALES • TREES • LIVING WALL • GREEN ROOF



STREET TREES

Along 8th Street, between Front Street to Jefferson Street, a beautiful, wellestablished canopy of trees exists in the Grove Plaza, Central Downtown, and the Capitol District. The trees are planted according to CCDC's "Urban Brick Streetscape Standard Type 1." Further south, in the 8th Street Marketplace, between Front and Myrtle streets, the trees are more newly established, but in keeping with a similar "Urban Brick Streetscape Type 1" standard. At the far southern end from River Street to Broad Street, in the Cultural District and part of the 8th Street Marketplace, tree placement is sparse as well as other landscaping.

The concept plan focuses on increasing the number of street trees at the sparse, southern end of 8th Street. Between River Street and Broad Street, if the proposed large public plaza with one-way traffic lane concept is created, double rows of trees could be planted at the public plazas. This lush double row would provide shade for events in the public plazas. A canopy of trees over the road naturally slows vehicle traffic, increases pedestrian safety, and creates a microclimate for bioswale plants. A variation in the class and type of trees is encouraged, which adds to the character of the area. See page 10, Cultural District Plazas.



Class I Trees Class II Trees Class III Trees 20'-30' height and crown 40'-60' height and crown 60'-90'+ height and crown

ELEMENTS Objective:

Encourage alternative fuel vehicle usage in Boise

Green Infrastructure

Benefits:

Easy access to charging stations downtown

Encourages alternative fuel vehicle usage

Application:

On-street parking spaces throughout downtown

Potential Partners:

CCDC ACHD ITD City of Boise Public Works Idaho Power Property Owners

Maintenance:

Similar to standard street maintenance

Opinion of Probable Cost: \$2,500/Charge Station

BIOSWALES • TREES • LIVING WALL • GREEN ROC

ALTERNATIVE FUEL VEHICLE CHARGE STATIONS & PARKING

To encourage alternative fuel vehicle use, Boise should strategically locate alternative fuel vehicle charging stations and parking designated for these vehicles. The parking should include alternative fuel vehicles, motorcycles, scooters and bicycles.

Some of the electric infrastructure for charging alternative fuel vehicles is already in place along 8th Street. Many street lights are currently equipped with electrical outlets. It may be possible to simply add signage and allow the charging of these vehicles to occur today.

The City of Boise currently allows "Zero Emission 'Green' Vehicles" to park for free at all parking meters downtown. 8th Street is an opportunity to further encourage zero emissions vehicle use by providing electric charging stations.



Some of the electric infrastructure for charging alternative fuel vehicles is already in place. Many street lights downtown are currently equipped with electrical outlets. See photo above from 8th Street.

Objective:

Green Infrastructure Lush landscape

Benefits:

Landscape in urban environment Reduce building heating/cooling demands

Reduce heat island effect Improve air quality Stormwater retention/reuse Preserve habitat and biodiversity Opportunity for community spaces

Application:

Rooftops of parking garages Rooftops of public and private buildings

Potential Partners:

CCDC

City of Boise Public Works City of Boise Parks & Recreation Property Owners

Maintenance:

Minimal Minimal weeding Supplemental irrigation Annual mowing

Opinion of Probable Cost:

TPO membrane and insulation \$8.00/sf

Vegetation System \$12.00-\$15.00/sf

Total System \$20.00-\$23.00/sf



WALL

GREEN ROOFS

Downtown rooftops provide an opportunity for the introduction of a "green landscape in the sky." Public and private buildings and parking garages pose an opportunity to introduce green landscape at the top levels of the structures.

Green roofs help to improve air quality, temperature regulation, provide areas for stormwater retention/reuse, preserve habitat and biodiversity, are an opportunity for local food production, and an opportunity for expanded community spaces. The insulating value of a green roof significantly reduces heating and cooling requirements of urban buildings.

Downtown rooftops are also an opportunity to introduce wind power to Boise. Small and silent wind turbines attached to buildings utilize aerodynamics to harvest wind distinct to the urban environment. This "free" energy could be used to reduce the demand on standard energy resources and reduce energy costs.



Green Roof at Idaho's Capitol

Rooftop Wind Power in Portland, OR

"While conventional roofs typically require replacement every 10-20 years, green roofs typically require replacement every 40-50 years."

-FPA

http://www.epa.gov/npdes/pubs/arid_climates_casestudy.pdf

SOURCE: WWW.VESPROINC.COI



LIVING WALLS

Imagine a vertical garden with green vegetation, colorful flowers and various textures. A living wall is simple to install and easy to relocate if needed. Living walls can be a few feet high or can scale the entire facade of a building.

Living walls come in multiple forms. A collection of vines planted at the base of a wall is a simple way to soften the hard edge of a building. The vines are started in a planter and encouraged to scale the building with the use of an attached modular grid system. Selected vines offer the opportunity for a vegetated wall year round in Boise. Living walls may also be constructed with living wall modular planting boxes which hold soil and the root system of the plants. This system may pose more challenges for Boise's climate, but offers the ability for a dynamic composition in plant type in color and texture.



LOCATION:

A living wall at the incomplete construction site at 8th and Main Street would be a great asset to the area. The vines could grow on the existing mural wall, against the blank wall of the Boise City National Bank building, or against the parking garage. On a larger scale, the 8th Street Concept Plan proposes infilling the construction site and creating a park with living walls and lush landscape. See page 17, Whole Park.

Objective:

ELEMENTS

Green Infrastructure

Lush landscape

Benefits:

Landscape in urban environment Aesthetic

Pedestrian scale

Microclimate

- wicrocimate
- Reduce building heating/cooling demands
- Improve air quality

Stormwater retention/reuse

Preserve habitat and biodiversity

Opportunity for community spaces

Application:

Blank walls of buildings Edges of parking lots and garages Freestanding walls Fences

Potential Partners:

DBA

City of Boise Public Works

City of Boise Parks & Recreation Property Owners

Maintenance:

Minimal

Minimal weeding

Supplemental irrigation

Opinion of Probable Cost:

25' wide x 20' high living wall section includes metal frame, planters, irrigation, plants, labor estimate \$7,500 each

Objective:

Public Art Placemaking Aesthetic Green Infrastructure

Benefits:

Placemaking Represent local and worldwide artists Destinations Landmark Character

Application:

Intersection curb bulb-outs Mid-block at sidewalks Public and private spaces

Potential Partners:

CCDC ACHD ITD City of Boise Department of Arts and History Local Artists Worldwide artists Property Owners

Maintenance:

Similar to standard public art maintenance

Opinion of Probable Cost:

\$20,000-50,000+ Street Public Art

ELEMENTS

PTURES • MURALS • WATER FEATURE



GREENING THE GROVE THROUGH INTERACTIVE GREEN ART

The concept of "Greening the Grove" has evolved from a singular public art piece into a collaboration of multiple local organizations working together to introduce green sustainable art elements to the 8th Street corridor. It is a public art concept for downtown Boise that embodies alternative energy and a "green" focus. Selected artists will design artwork that integrates alternative energy. The alternative energy element of the art might include: solar, wind, water or kinetics. Art elements designed by local artists will speak to alternative energy through design and function.

The art elements may function in an interactive method with pedestrians. The art may incorporate kinetic pavers made of local recycled glass that glow when stepped on or whirligigs spinning in the wind that power interactive art or nearby street lamps. Photovoltaics integrated in the art could collect energy from the sun to power a kiosk that provides information to pedestrians. The concept of "Greening the Grove" would extend along the spine of 8th Street by connecting nodes, which would improve wayfinding and create a sense of place.

MAJOR ART INSTALLATIONS

Many places along 8th Street are opportunities for Public Art. Primary locations include the intersection curb bulb-outs, mid-block at the sidewalks, and at public and private spaces. Public Art is created by an artist to be sited in a specific public space. The art pieces may come in many forms and aimt to heighten awareness, challenge assumptions, transform the landscape, express community values and represent the City's image. Public art pieces energize public spaces, reveal the character of a neighborhood and often help spaces thrive.



Kinetic Pavers

8TH STREET CONCEPT PLAN ELEMENTS



EVENTS AND CULTURE

An integral component to placemaking is the introduction and existence of public events. The Grove Plaza, Central Downtown, and the Capitol District host many popular events throughout the year, Alive After 5, First Thursday, Christmas in the City, Fall for Boise, Jazz on the Grove, and the Boise Curb Cup, to name a few.

The incredibly successful Capital City Public Market was established downtown in 1994, and has grown from 12 vendors to more than 150 venders. At one time it was located in "Boise's Hole," but now occupies Grove Plaza, 8th Street from Main to Bannock, and Idaho Street from Capitol to 9th streets. The 8th Street Marketplace, also known as BoDo, also hosts First Thursday, the Boise Curb Cup, and other events. It has become a shopping and dining destination.

The Cultural District currently lacks events. If the proposed large public plaza with one-way traffic lane concept is created, it would become a place for the general public to enjoy cultural events, for street vendors to set up carts, and patio diners to enjoy the comfortable Idaho weather. This could make the Cultural District a lively and vibrant destination.



Festivals Celebrations Holidays Family

Pets Parades Markets **Road Races** Street Public Art Gallery Art Food Drink

Music Performance Film Theater

Politics **Fundraisers** Rallies Classes

Objective:

Public Art

Beautify blank building walls

Benefits:

Opportunity for artists Opportunity for community groups Placemaking Landmark

Cultural event

Application:

Temporary or permanent murals at blank building walls

Temporary or permanent murals at traffic light boxes

Temporary or permanent murals at street furnishings

Potential Partners:

CCDC

City of Boise Department of Arts and History

Local Artists

Property Owners

Maintenance:

Similar to standard mural maintenance

Opinion of Probable Cost: Mural \$10,000-\$15,000

ELEMENTS

ULPTURES • MURALS • PAVING PATTERNS



MURALS

Blank building walls and traffic boxes offer an opportunity to install murals by local artists. These murals may change on a regular basis, or be installed permanently.



Boise City National Bank Building, now known as the 805 Building



Boise Centre on the Grove proposed Grove Pocket Park





EXISTING MURAL ART LOCATIONS:

Temporary wall at the corner of 8th and Main Streets Foothills School at 618 S. 8th Street Escalator at Capital Terrace Building, 150 N. 8th St.

TRAFFIC BOX MURAL ART LOCATIONS:

8th and Idaho Streets 8th and Front Streets 8th and Bannock Streets

PROPOSED MURAL ART LOCATIONS:

South facade of Boise City National Bank Building Boise Centre at proposed Grove Pocket Park Blank building walls in the Cultural District Additional Traffic Box locations

ELEMENTS Objective:

PATTERNS

Public Art

Slows vehicular traffic

Placemaking

Stormwater management through permeable pavement systems

Benefits:

Alerts and slows traffic

Opportunity for artists

Opportunity for community groups

Placemaking

Cultural event

Application:

Crosswalks Intersections Mid-Block patterns

Potential Partners:

CCDC ACHD

ITD

City of Boise Public Works City of Boise Department of Arts and History Local Artists

Maintenance:

Street sweeping/vacuuming

Opinion of Probable Cost:

Concrete \$6.00/sf Integral color concrete add \$1.00/sf Permeable Pavers \$7.00-\$8.00 Pervious Concrete \$6.00/sf Pavers with Permeable Joints \$12.00/sf Brick \$12.00/sf

PAVING PATTERNS AT CROSSWALKS AND INTERSECTIONS

•

PAVING

FEATURES

WATER

materials and designs. The materials may include colored and/or textured concrete or a design out of permeable pavement. The intersections and crosswalks may be raised from the road surface to aid in slowing traffic and clearly define the pedestrian crossing area.

A specific design might reflect the immediate character of the area and is an opportunity for artists to "paint" a mural on the pavement. Special intersections flanking existing places might receive a more detailed treatment than other intersections along 8th Street. This application lends itself to wayfinding and placemaking.



The material options for paving patterns are nearly endless. Some examples are:

Integral color concrete Pervious concrete Permeable pavers Concrete pavers Stamped concrete

Painted concrete (temporary) Brick pavers Granite pavers Stone Cobblestone

Glass pavers Adhered pattern to surface Embedded pattern to surface Stamped asphalt Thermoplastic embedded asphalt

Objective:

Public Art Placemaking Cooling effect

Benefits:

Placemaking Cooling effect Place for children to play Softens urban landscape Masks noise, soothing effect

Application:

Public and Private Plazas

Potential Partners:

Boise City Canal District CCDC ACHD ITD City of Boise Department of Arts and History Artists Public Works Property Owners

Maintenance:

Similar to standard water feature maintenance

Opinion of Probable Cost:

Small water feature \$30,000-\$60,000

Large water feature \$30,000-\$100,000

ELEMENTS

SCULPTURES • WATER FEATURES • PAVING PATTERNS



WATER FEATURES

Water features integrated into urban environments help to soften the typically hard streetscape, provide a cooling effect, a place for children to play, and serve as a focal point.

Before the Grove Plaza was developed, the 1866 Old Boise City Canal, known as the "Grove Street Ditch" ran under the Plaza. During the development of the Grove Plaza, the canal was re-routed around the plaza to the south.

The 8th Street Concept Plan suggests water features at various locations along the corridor. These locations might be public and private plaza spaces in front of new developments like the Post Office Plaza, and the proposed plazas in the Cultural District and the 8th Street Marketplace.



SOURCE: MODUS ARCHITECTU

AUTOMOBILE PARKING

PEDESTRIAN

Permeable Pavement Parallel Parking

Permeable pavement is proposed at all onstreet parallel parking spaces. With budget limitations permeable pavement parallel parking might be applied in a rhythmic pattern or at more prominent blocks. The primary objective is to reduce stormwater runoff. The difference in color and texture of the permeable pavement helps to visually designate the parking areas from the pedestrian and traffic areas. A band of a different color paving might replace standard street paint to designate individual spaces.

Parking Dedicated to Alternative Fuel Vehicles

Designating parking spaces for alternative fuel vehicles encourages the use of alternative fuel vehicles including cars, motorcycles, scooters and bicycles. The increase of alternative fuel vehicles leads to reduced emissions and improved air quality for Boise.

Electric Vehicle Charge Station

Electric vehicle charge stations might be sponsored by the city or local businesses to encourage use of alternative fuel vehicles. A typical charge station is compact and would fit nicely at the sidewalk edge of an on-street parking space.



BICYCLE



ELEMENTS

AUTOMOR

PERMEABLE PAVEMENT

Objective:

Improve mobility Reduce stormwater runoff

Benefits:

Reduces demand on stormwater system

Microorganisms consume vehicle oils from runoff

Reduces heat island effect Aesthetically pleasing

Application:

On-street parallel parking spaces

Potential Partners:

CCDC

ACHD

City of Boise Public Works

Maintenance: Routine street vacuuming

Opinion of Probable Cost: See Permeable Pavement page 25

Permeable Pavement at Parallel Parking

Objective:

Improve mobility Bicycle-friendly corridor Encourage bicycle use

Benefits:

Dedicated space for bicycles

Opportunity to use permeable pavement at bike lanes

Safety for bicyclists

Application:

The entire east/west axis and multiple north/south intersecting streets

Potential Partners:

CCDC ACHD

ITD

Maintenance:

Street sweeping/vacuuming for permeable pavement

Repainting for striped lanes

Opinion of Probable Cost:

Changing the existing bike lanes would occur in conjunction with changing the travel lane, parking and sidewalk width.

\$8.00/If asphalt and paint for bike lanes, requires repainting

\$30.00/lf for 5'-0" wide permeable pavement bike lanes

ELEMENTS

DESTRIAN

BICYCLE



BICYCLE LANES

With minimal alterations to the 8th Street streetscape, bicycle lanes could be accommodated with asphalt paint and minor adjustments in drive lane widths. 8th Street currently serves as a bicycle corridor for commuters and recreational users. The Green Belt connects through the Anne Frank Memorial to 8th Street bringing bicycle traffic from the southeast to the southwest to the core of downtown. The goal would be to bring bicycle lanes traveling northbound and a southbound bicycle lane along 8th Street. A contra-lane, a bicycle lane that allows cyclists to travel safely against vehicular traffic, would be required in areas of one-way traffic.

Bicycle lanes may be defined by standard white street painting and bicycle symbols. Or the lanes could be constructed with a permeable pavement material which allows stormwater to pass through. This permeable pavement would be a contrasting color to the street surface and adjacent parallel parking surface to denote the extent of the bicycle lane. Permeable pavement reduces the demand on the stormwater system, eliminates the need for re-painting of bicycle lanes and it visually dedicates a portion of the road to the cyclist. See page 25, Permeable Pavement.



R

Secure bicycle parking **Benefits:** Encourages bicycle use Provides secure bicycle parking Reduces bicycle lock damage to

Objective: Improve mobility

trees and fences **Application**: Multiple installations along 8th Street and/or intersection streets **Potential Partners:**

CCDC

ACHD

ITD

ELEMENTS

PEDESTRIAN



BICYCLE PARKING

With the increase in bicycle use in downtown, there is a greater demand on designated bicycle parking areas. Planning for bicycle parking racks along the 8th Street corridor and the intersecting streets will be crucial to minimize bicycle parking at trees and other non-desirable areas.

Bicycle parking lots may vary in size, but could be strategically located for ease of use and access in some of the busiest areas of downtown. Bicycle racks may be individual units mounted in the sidewalk between trees or they may be a group unit in an on-street parking stall dedicated to bicycle. Design of the bicycle racks is an opportunity for artists to be creative and add character to the streetscape.

Additional bicycle parking could be located along the main entrances to the Grove Plaza. The bicycle parking might be covered and/or uncovered to accommodate events and activities in the heart of downtown. Bicycle parking racks may include vertical storage to help keep bicycles from toppling over on each other. Covered bicycle parking stations could be designed by local artists. Bicycle parking could be located in the berm along the north access to the Grove Plaza and in between trees along the south access to the Grove Plaza. As demand increases additional bicycle parking can be provided.



automor

Maintenance:

Similar to standard bicycle storage maintenance

Opinion of Probable Cost:

\$125 per rack

Objective:

Improve mobility Improve pedestrian safety at intersections

Benefits:

Reduces crossing distance Narrowed road width slows traffic Improves visibility at crosswalk Creates small public spaces at corners

Application:

Intersections Mid-block

Potential Partners:

CCDC ACHD ITD

City of Boise Public Works

City of Boise Parks and Recreation City of Boise Department of Arts and History

Maintenance:

Similar to standard sidewalk maintenance

Opinion of Probable Cost:

\$18.00/sf entire intersection includes concrete curbs, integral color concrete patterned crosswalks and intersection, stormdrains.

Does not include bioswales, artwork, street furnishings, relocation of existing utilities or storm sewer, etc.

ELEMENTS

TRIAN • BICYCLE



AUTOMOBILE

CURB BULB-OUTS

A curb bulb-out extends the sidewalk and curb lane into the parallel parking lane. This reduces the street width and is typically located at intersections. This improves visibility and reduces the crossing distance for pedestrians. The narrowing of the road encourages vehicular traffic to slow down. A curb bulb-out may occur at intersections and at mid-block.

The concept plan proposes a series of curb bulb-outs at most intersections along 8th Street. Bulb-outs may be constructed of a contrasting pavement material, pattern, or color from the sidewalks. Permeable pavement may be used at these areas as well as the installation of planter bioswales. A planter flush with the sidewalk or raised at the bulb-out will discourage pedestrians from crossing intersections outside of the crosswalks. The additional space a bulb-out adds to a sidewalk allows room for street furnishings, wayfinding elements and public art.



Curb Extension Bioswale

Paved Curb Bulb-Out

Objective:

OURCE: WWW.INTEGRATEDPAVING.COM



HIGH-VISIBILITY CROSSWALKS

High-visibility crosswalks typically include white stripes painted across the road. These are easier for vehicles and pedestrians to locate. They should be a minimum of 10 feet wide. The introduction of pattern, color and varied material from the street asphalt also improves awareness of crosswalks. The crosswalk may also be raised slightly above the road surface to alert drivers.

Crosswalks are an opportunity for artists to design the pattern through changes in a materials texture and color. The design of a crosswalk might characterize a specific area. See also page 33, Paving Patterns at Crosswalks and Intersections.



DURCE: MODUS ARCHITECTUI

ELEMENTS

Safety Slows traffic

Encourages pedestrian use of crosswalks

Opportunity to be designed by an artist

Application:

Crosswalks at intersections and mid-block

Potential Partners:

CCDC ACHD

ITD

City of Boise Department of Arts and History

Maintenance:

Street sweeping

Opinion of Probable Cost:

Concrete \$6.00/sf Integral color concrete add \$1.00/sf Pervious Concrete \$6.00/sf Permeable Pavers \$7.00-\$8.00/sf Pavers with permeable joints \$12.00/sf

Brick \$12.00/sf

KIOSKS

Objective:

Wayfinding Improve mobility

Benefits: Maps guide visitors

Connects to placemaking

Opportunity to advertise upcoming events

Application:

Located strategically along the 8th Street corridor

Potential Partners:

CCDC

ACHD DBA

City of Boise Department of Arts and History

Maintenance:

Updating maps

Refilling brochure boxes

Routine cleanup of expired announcements

Opinion of Probable Cost:

\$2,500-4,500 per Kiosk



WAYFINDING

Wayfinding is the ability for people to locate themselves in relation to the context of a dynamic space. Wayfinding elements provide graphic and/or audible methods to convey location and directions to pedestrians. Wayfinding elements may vary in scale and include elements that guide vehicles such as a gateway or landmark, and elements that guide pedestrians such as signage and kiosks. Public art installations and street furnishings also help to lead the pedestrian to the next place.

Kiosks

A kiosk is a literal wayfinding element available for public use. A series of kiosks along 8th Street would provide wayfinding information to locate themselves within the 8th Street corridor and downtown Boise and connecting them to art elements and the "Greening the Grove" project.

The frame of a kiosk might reflect the character of the immediate area and include a color coded map. The kiosk may also include a bin for brochures and maps.

Alternative "green" energy sources integrated with the kiosks could power electronic kiosks. Electronic kiosks could provide up-to-date accurate information regarding public events in downtown. Kiosks may also serve as an educational tool to provide real-time data on power usage and power generated by nearby alternative energy art installations.



8th Street Concept Plan Elements



STREET FURNISHINGS

Street furnishings include items found at the sidewalk like benches, planters, street lights, garbage and recycle bins, bike racks, newspaper and post boxes, transit stations, signage and banners.

Street furnishings provide a sense of scale for the pedestrian and an interactive environment. A street bench invites pedestrians to pause and enjoy the moment. Street furnishings provide wayfinding, and often reflect the character of the area.

The City of Boise has a well defined standard for most street furnishings. In the Cultural District there is an opportunity to be flexible with the selection of street furnishings. Being a relatively undeveloped part of 8th Street, there is an opportunity to depart from the city standard. A distinctive character could be developed for this area. Local artists could be commissioned to design street furnishings like benches and bike racks.



Benches

Awnings

Planters

Patio seating

Table umbrellas



Hanging plants Tree cages Tree grates Bioswale grates Street lights

Garbage cans Recycle bins Bicycle racks Newspapers Kiosks

Post boxes Transit stations Signage Sandwich boards Banners

Parking meters AFV charging stations Traffic signal boxes Fire hydrants

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8th Street Concept Plan OPINION OF PROBABLE COST

8th Street Concept Plan Opinion of	Probable Cost			Spring 2011
ITEMS	Range - Low	ţ.	Range - High	Concept Plar Documen
Artwork - Billboard	\$10,000.00	ea	\$15,000.00	ea
Artwork - Curb	\$20,000.00	ea	\$50,000.00	ea
Artwork - Gates	\$20,000.00	ea	\$50,000.00	ea
Artwork - Gateway/Roundabout/Traffic Island	\$20,000.00	ea	\$50,000.00	ea
Artwork - Mural	\$10,000.00	ea	\$15,000.00	ea
Bicycle Lane Paint	\$8.00	Лf		
Bioswale - Curb Extension	\$36.00	/sf		
Bioswale - Median	\$125.00	/sf		
Bioswale - Planter	\$125.00	/sf		
Demo	\$1.00	/sf		
Engineered fill, compacting, etc.	\$16.00	/yd ³		
Extended Paving Patterns	\$12.00	/sf		
Intersection with bulb-outs	\$18.00	/sf		
Landscape - Planter	\$125.00	/sf		
Living Wall	\$15.00	/sf		
Paving - Brick	\$12.00	/sf		
Paving - Concrete	\$6.00	/sf		
Paving Patterns (integral color upgrade)	\$1.00	/sf		
Pervious Concrete Bicycle Lane	\$6.00	/sf		
Pervious Concrete Parking	\$6.00	/sf		
Plaza	\$7.00	/sf		
Roundabout/Traffic Island	\$5.00	/sf	\$8.00	/sf
Sidewalk - Concrete	\$6.00	/sf		
Site grubbing and grading	\$1.00	/sf	1	
Traffic Light - Pedestrian	\$12,000.00	ea		
Trees	\$4,000.00	ea		
Typical Street Block (One-way)	\$500.00	Λf	\$1,000.00	Λf
Typical Street Block (Two-way)	\$1,000.00	Лf	\$1,500.00	Λf
Water Feature - Plaza small	\$30,000.00	ea	\$60,000.00	
Water Feature - Pools	\$30,000.00	ea	\$100,000.00	
Water Feature - Street large	\$30,000.00	ea	\$100,000.00	

Note: Opinion of Probable Cost has been provided for the purpose of helping CCDC budget and plan for potential projects. It is not meant to be a finite number and the costs will vary depending on the bidding climate and subsurface utilities that may be impacted. Opinion of Probable Cost does not include utility relocation or storm sewer relocation.

8th Street Concept Plan OPINION OF PROBABLE COST

8th Street Concept Plan C	Dpinion of	Pro	bable Cost	t		Spring 2011	
					PRICE RANGE		
	QUANTI	TY	COST		LOW	HIGH	
River Street Intersection							
Demo	9,600	sf	\$1.00	/sf	\$9,600.00		
Intersection with bulb-outs	9,600	sf	\$18.00	/sf	\$172,800.00		
Trees	1		\$4,000.00	ea	\$4,000.00		
Bioswale - Planter	225	sf	\$125.00	ea	\$28,125.00		
Artwork - Curb	4		\$20,000.00	ea	\$80,000.00	\$200,000.00	
			TOTAL		\$294,525.00	\$414,525.00	
River - Fulton Street Block							
Demo	18,300	sf	\$1.00	/sf	\$18,300.00		
Typical Street Block (One-way)	250	If	\$500.00	Λf	\$125,000.00	\$250,000.00	
Bioswale - Planter	1.000	sf	\$125.00	/sf	\$125,000.00		
Trees	22		\$4,000,00	ea	\$88,000.00		
Pervious Concrete Parking	1,225	sf	\$6.00	/sf	\$7,350.00		
Pervious Concrete Bicycle Lane	2,000	sf	\$6.00	/sf	\$12,000.00		
Plaza	6,500	sf	\$7.00	/sf	\$45,500.00		
Paving Patterns	5,200	sf	\$1.00	/sf	\$5,200.00		
Water Features	1		\$30,000.00		\$30,000.00	\$60,000.00	
Artwork - Curb	4		\$20,000.00	ea	\$80,000.00	\$200,000.00	
			TOTAL		\$536,350.00	\$811,350.00	
Fulton Street Intersection	5.000	ef.	\$1.00	lef	\$5,000,001		
Intercontion with hulb oute	5,000	of	\$1.00	151	\$0,000.00		
Intersection with build-outs	5,000	SI	\$10.00	/51	\$90,000.00	\$200,000,00	
Artwork - Curb	- 7		TOTAL	ea	\$175,000.00	\$295,000.00	
			101/12	\vdash	\$110,000.00	9200,000.00	
Fulton Street (East/West) 9th Stre	et - Capitol B	lvd.					
Demo	38,500	sf	\$1.00	/sf	\$38,500.00		
Typical Street Block (Two-way)	610	If	\$500.00	Λf	\$305,000.00	\$610,000.00	
Bioswale - Planter	2,800	sf	\$125.00	/sf	\$350,000.00		
Trees	36		\$4,000.00	ea	\$144,000.00		
Paving Patterns	12,000	sf	\$1.00	/sf	\$12,000.00		
Pervious Concrete Parking	8,800	sf	\$6.00	/sf	\$52,800.00		
Artwork - Curb	4		\$20,000.00	ea	\$80,000.00	\$200,000.00	
			TOTAL		\$982,300.00	\$1,407,300.00	
Fulten - Martin Street Block							
Perio	17,500	of	\$1.00	/ef	\$17,500,00		
Typical Street Block (One-way)	250	If	\$500.00	Λf	\$125,000,00	\$250,000,00	
Rioswale - Planter	970	sf	\$125.00	/sf	\$121,250,00		
Trees	17		\$4,000,00	ea	\$68,000.00		
Pervious Concrete Parking	1.615	sf	\$6.00	/sf	\$9,690.00		
Pervious Concrete Bicycle Lane	2,000	sf	\$6.00	/sf	\$12,000.00		
Plaza	8,000	sf	\$7.00	/sf	\$56,000.00		
Paving Patterns	2,900	sf	\$1.00	/sf	\$2,900.00		
Artwork - Curb	4	-	\$20,000.00	ea	\$80,000.00	\$200,000.00	
			TOTAL		\$492,340.00	\$737,340.00	
Myrtle Street Intersection	47.050		64.00	1.6	647.050.00		
Demo	17,350	ST	\$1.00	/st	\$17,350.00		
Intersection with bulb-outs	7,315	st	\$18.00	/st	\$131,670.00		
Extended Paving Pattern	6,500	st	\$12.00	/st	\$78,000.00	6000.000.00	
Artwork - Curb	4	\vdash	\$20,000.00	ea	\$80,000.00	\$200,000.00	
		\vdash	TOTAL	\vdash	\$307,020.00	\$427,020.00	

8TH STREET CONCEPT PLAN OPINION OF PROBABLE COST

Myrtle - Broad Street Block						
Demo	15,600	sf	\$1.00	/sf	\$15,600.00	
Typical Street Block (One-way)	250	lf	\$500.00	Лf	\$125,000.00	\$250,000.00
Bioswale - Planter	920	sf	\$125.00	/sf	\$115,000.00	
Trees	21	ea	\$4,000.00	ea	\$84,000.00	
Pervious Concrete Parking	1,200	sf	\$6.00	/sf	\$7,200.00	
Pervious Concrete Bicycle Lane	1,200	sf	\$6.00	/sf	\$7,200.00	
Plaza	6,100		\$7.00	/sf	\$42,700.00	
Paving Pattern	360		\$1.00	/sf	\$360.00	
Water Feature	1		\$30,000.00	ea	\$30,000.00	
Artwork - Curb	4		\$20,000.00	ea	\$80,000.00	\$200,000.00
			TOTAL		\$507,060.00	\$752,060.00
Broad Street Intersection					1	
Demo	900	sf	\$1.00	/sf	\$900.00	
Curb Bulb-out - SW corner	900	sf	\$18.00	/sf	\$16,200.00	
Artwork - Curb	3		\$20,000.00	ea	\$60,000.00	\$150,000.00
			TOTAL		\$77,100.00	\$167,100.00
Broad - Front Street Block						
No major change		sf	\$1.00	/sf	\$0.00	
Bike Lane (Southbound) Painted	275	lf	\$8.00	Лf	\$2,200.00	
Artwork - Curb	2		\$20,000.00	ea	\$40,000.00	\$100,000.00
			TOTAL		\$42,200.00	\$102,200.00
Front Street Intersection						
Demo	8,800	sf	\$1.00	/sf	\$8,800.00	
Paving Pattern	2,445	sf	\$18.00	/sf	\$44,010.00	
Extended Paving Pattern	6,355		\$12.00	/sf	\$76,260.00	
Artwork - Curb	4		\$20,000.00	ea	\$80,000.00	\$200,000.00
		\square	TOTAL	\square	\$209,070.00	\$329,070.00
Front - Main Street Block						
Demo (for Bike Racks)	1,575	sf	\$1.00	/sf	\$1,575.00	
Bicycle Racks	70		\$125.00	ea	\$8,750.00	
Paving - Concrete	1,200	sf	\$6.00	/sf	\$7,200.00	
Paving - Brick	384	\vdash	\$12.00		\$4,608.00	£200.000.00
Artwork - Curb	4		\$20,000.00 TOTAL	ea	\$102,133.00	\$222,133.00
Grove Bocket Park						
Site grubbing and grading	1 000	of	\$1.00	/cf	\$1,000,001	
Permeable Paver Plaza	667	sf	\$7.00	/sf	\$4,669,00	
Bioswale - Planter	333	sf	\$125.00	/sf	\$41,625,00	
Artwork - Curb	1	-	\$20.000.00	ea	\$20,000,00	\$50.000.00
			TOTAL		\$67,294.00	\$97,294.00
Main Street Intersection						
Demo	8,100	sf	\$1.00	/sf	\$8,100.00	
Intersection with bulb-outs	3,600	sf	\$18.00		\$64,800.00	
Extended Paving Pattern	4,500	sf	\$12.00	/sf	\$54,000.00	
Artwork - Curb	4		\$20,000.00	ea	\$80,000.00	\$200,000.00
Artwork - Gates	2		\$20,000.00	ea	\$40,000.00	\$100,000.00
			TOTAL		\$246,900.00	\$426,900.00

8th Street Concept Plan OPINION OF PROBABLE COST

Whole Park at 8th and Main Street						
Demo existing wall	370	sf	\$1.00	Лf	\$370.00	
Engineered fill, compacting, etc.	8.075	vd ³	\$16.00	/vd ³	\$129,200.00	
Plaza	3.650	sf	\$7.00	/sf	\$25,550.00	
Landscape - Planter	7,250	sf	\$125.00	/sf	\$906,250.00	
Living Mall - 25 w x 20th with metal						
frame planters irrigation plants						
labor	10		\$7 500 00		\$75,000,00	
Arbuork Curb	2	0.0	\$7,500.00	0.0	\$15,000.00	\$100,000,00
Adwork - Curb	2	ea	\$20,000.00	ea	\$1 176 370 00	\$100,000.00
		\vdash	TOTAL	\vdash	\$1,170,570.00	\$1,250,570.00
Main - Idaho Street Block				<u> </u>	1	
No change			\$0.00	/sf	\$0.00	
Bike Lanes Painted	1,100	lf	\$8.00	Λf	\$8,800.00	
Artwork - Curb	2		\$20,000,00	ea	\$40,000,00	\$100,000,00
			TOTAL		\$48,800.00	\$108,800.00
I data Oliment latera estilare						
Demo	0.000	of	\$1.00	l/of	50 000 92	
Intersection with bulk suits	8,900	SI	\$1.00	/51	\$8,900.00	
Intersection with build-outs	5,175	ST	\$18.00	/ST	\$67,950.00	
Extended Paving Patterns	5,125	sr	\$12.00	/sr	\$61,500.00	6450 000 00
Artwork - Curb		\vdash	\$20,000.00	ea	\$60,000.00	\$150,000.00
Artwork - Gates	2		\$20,000.00	ea	\$40,000.00	\$100,000.00
		\vdash	TOTAL	\vdash	\$238,350.00	\$288,350.00
Idaho - Bannock Street Block					I	
No change		ΓT	\$0.00	/sf	so.ool	
Rike Lanes Dainted	1 100	IF	\$8.00	/SI	\$8,800,00	
Artwork - Curb	1,100	0.9	\$20,000,00	0.2	\$40,000,00	\$100,000,00
Artwork - Curb	2	ea	\$20,000.00	ea	\$40,000.00	\$100,000.00
		+	TOTAL	+	\$40,000.00	\$100,000.00
Bannock Street Intersection		L (L		L L		
Demo	5 700	ΓT	\$1.00	/sf	\$5,700,001	
Intersection with hulb outs	5 700	IF	\$18.00	AF	\$102,600,00	
Artwork - Curb	3,700	03	\$20,000,00	03	\$60,000,00	\$150,000,00
Atwork - Cuib		ea	320,000.00	ea	\$168 300 00	\$150,000.00
		\vdash	TOTAL	\vdash	\$108,500.00	\$230,300.00
Post Office Plaza				<u> </u>		
Demo	4 400	ΙT	\$1.00	/sf	\$4,400,00	
Plaza	3 600		\$7.00	/sf	\$25,200,00	
Landscape - Planter	625		\$125.00	/sf	\$78 125 00	
Trees	2		\$4,000.00	ea	\$8,000,00	
Water Feature	1		\$30,000,00	63	\$30,000,00	\$60,000,002
Artwork - Curb	1		\$20,000,00	~	\$20,000,00	\$50,000,00
			TOTAL	\vdash	\$165,725.00	\$225,725.00
Bannock - Jefferson Street Block						
Demo	21,000	sf	\$1.00	/sf	\$21,000.00	
Typical Street Block (Two-way)	245	lf	\$1,000.00	Лf	\$245,000.00	\$367,500.00
Trees	13	ea	\$4,000.00	ea	\$52,000.00	
Bioswale - Planter	525	sf	\$125.00	/sf	\$65,625.00	
Sidewalk	8,000	sf	\$6.00	/sf	\$48,000.00	
Pervious Concrete Parking	3,000	sf	\$6.00	/sf	\$18,000.00	
Pervious Concrete Bicycle Lane	1,500	sf	\$6.00	/sf	\$9,000.00	
Artwork - Curb	2	ea	\$20,000.00	ea	\$40,000.00	\$100,000.00
			TOTAL		\$498,625.00	\$681,125.00

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