

# **Spokane Park Board Agenda**

Sept. 8, 2016 – 1:30 p.m. City Hall, City Council Chambers 808 W. Spokane Falls Blvd, Spokane, Washington

# Park Board Members:

Wright, Chris– President Traver, Susan – Vice President Eadie, Leroy Kelley, Ross Van Voorhis, Ken Selinger, Sam Pendergraft, Lauren Sumner, Nick McGregor, Ted Greta Gilman Mumm, Candace – Council Liaison

# <u>Agenda</u>

# 1. Roll Call: Pamela Clarke

### 2. Minutes:

A. Aug. 11, 2016, Regular Park Board meeting minutes and Study Session notes B. Aug. 31, 2016, Special Park Board meeting minutes

- 3. Additions or Deletions to the Agenda: A. None
- 4. <u>Special Guests</u>:
   A. Introduction of new Park Board member Greta Gilman *Chris Wright*
- 5. **<u>Claims</u>**: Claims for the month of August 2016 Susan Traver

# 6. <u>Financial Update</u>:

- A. Introduction of Budget & Finance Director Mark Buening
- 7. Special Discussion/Action Items:
  - A. Quarterly Performance Measures Jason Conley
- Committee Reports Action Items: Urban Forestry Tree Committee: Aug. 30, 2016 – Lauren Pendergraft A. No action items

**Golf Committee**: Sept. 6, 2016 – *Nick Sumner* 

A. No action items

**Land Committee**: Special Park Board meeting-Aug. 31, 2016 – *Ken Van Voorhis* A. In lieu of the Land Committee, there was a Special Board meeting to take action on the Conservation Futures parcels nominated for the 2016 Conservation Futures acquisition list.

# Recreation Committee: Sept. 1, 2016 – Sam Selinger

A. Witter Pool Deck project management & testing contract (\$51,200)

# Riverfront Park Committee: Sept. 6, 2016 - Ted McGregor

- A. Alternate delivery method
- B. Riverfront Park Brownfield designation resolution
- C. Howard Street Bridge South supplemental contract #5 (\$70,749)
- D. Looff Carrousel Utility MOU (budget neutral)
- E. GeoEngineering contract amendment (budget neutral)
- F. Fort Walla Walla Museum amendment (\$92,388.56)
- G. Spokane Tribe of Indians amendment (\$100,640.18)

# Finance Committee: Sept. 6, 2016 - Susan Traver

A. Witter Pool deck repair contract with Cameron-Reilly, LLC (\$404,321)

# Bylaws Committee: Ross Kelley

A. No action items

### 9. <u>Reports</u>: Park Board President: Chris Wright

# Liaison Reports:

- A. Conservation Futures Liaison Ken Van Voorhis
- B. Parks Foundation Liaison Susan Traver
- C. Council Liaison Candace Mumm

# Director's Report: Leroy Eadie

# 10. Executive Session:

A. None

# 11. Correspondence:

- A. Letters/emails: Affordable Family Entertainment/Save the Rides emails
- B. Newsletters:

Corbin Senior Activity Center Hillyard Senior Center Southside Senior and Community Center Sinto Senior Activity Center

# 12. <u>Public Comments</u>: None

# 13. Adjournment:

 A. Next Committee meeting dates: Golf Committee: 8:05 a.m. Oct. 11, 2016, City Hall Conference Room 5A Land Committee: 3 p.m. Oct. 5, 2016, City Hall Conference Room 5A Recreation Committee: 3 p.m. Oct. 6, 2016, Manito Meeting Room, Manito Park Riverfront Park Committee: 8:05 a.m. Oct. 10, 2016, City Council Briefing Center Finance Committee: 3 p.m. Oct. 11, 2016, City Hall Conference Room 2B Urban Forestry Committee: 4:15 p.m. Oct. 4, 2016, Woodland Center, Finch Arboretum

- B. Park Board: 1:30 p.m. Oct. 13, 2016, City Council Chambers
- C. Park Board Study Session: 3:30 p.m. Oct. 13, 2016, City Hall Conference Room 5A

#### Agenda is subject to change

AMERICANS WITH DISABILITIES ACT (ADA) INFORMATION: The City of Spokane is committed to providing equal access to its facilities, programs and services for persons with disabilities. The Spokane City Council Chamber in the lower level of Spokane City Hall, 808 W. Spokane Falls Blvd., is wheelchair accessible and also is equipped with an infrared assistive listening system for persons with hearing loss. Headsets may be checked out (upon presentation of picture I.D.) at the City Cable 5 Production Booth located on the First Floor of the Municipal Building, directly above the Chase Gallery or through the meeting organizer. Individuals requesting reasonable accommodations or further information may call, write, or email Lisa Richards at (509) 625-6909, 808 W. Spokane Falls Blvd., Spokane, WA, 99201; or Irichards@spokanecity.org. Persons who are deaf or hard of hearing may contact Ms. Richards at (509) 625-6909 through the Washington Relay Service at 7-1-1. Please contact us forty-eight (48) hours before the meeting date.

# CITY OF SPOKANE PARK AND RECREATION DEPARTMENT AUGUST 2016 EXPENDITURE CLAIMS FOR PARK BOARD APPROVAL - SEPTEMBER 8, 2016

# PARKS & RECREATION:

TOTAL EXPENDITURES:	\$ 2,332,274.33
CAPITAL OUTLAY	\$ 27,144.64
MAINTENANCE & OPERATIONS	\$ 132,006.81
SALARIES & WAGES	\$ 144,466.17
GOLF:	-
CAPITAL OUTLAY	\$ 581,109.28
RFP BOND 2015 IMPROVEMENTS:	
FINCH MEMORIAL ARBORETUM FUND	\$
COMMUNITY DEV BLOCK GRANTS (CAPITAL)	\$ -
CAPITAL IMPROVEMENTS - 2008 - PARK	\$ 1,285.05
PARK CUMULATIVE RESERVE FUND	\$ 3,311.82
CAPITAL OUTLAY	\$ 46,421.45
MAINTENANCE & OPERATIONS	\$ 394,989.12
SALARIES & WAGES	\$ 1,001,539.99

# RESOLUTION NO. 2016 - \_\_\_\_\_

A resolution establishing the Riverfront Park Brownfield Redevelopment Opportunity Zone and the Riverfront Park Brownfield Renewal Authority.

WHEREAS, reforms to the State Model Toxics Control Act have created new tools to promote cleanup and redevelopment of brownfields; and

WHEREAS, RCW 70.105D.150 authorizes the City to designate a geographic area within the City boundary as a redevelopment opportunity zone upon the adoption of a resolution that provides for certain determinations and commitments; and

WHEREAS, RCW 70.105D.160 authorizes the City to establish by resolution a brownfield renewal authority for the purpose of guiding and implementing the cleanup and reuse of properties within a designated redevelopment opportunity zone; and

WHEREAS, the City has performed an analysis of City-owned property in downtown Spokane, hereinafter referred to as the Riverfront Park, and determined that based upon the definition of "brownfield property" set forth in RCW 70.105D.020 (3), the Riverfront Park property constitutes a brownfield property; and

WHEREAS, the City's analysis of Riverfront Park, a copy of which is attached as Exhibit A, demonstrates that the criteria for a redevelopment opportunity zone designation set forth in RCW 70.105D.150 (1) has been met; and

WHEREAS, it is the desire of the City Council to adopt this resolution to establish the Riverfront Park Redevelopment Opportunity Zone pursuant to RCW 70.105D.150; and

WHEREAS, it is the desire of the City and the Spokane Park Board to have the Park Board members serve as the board of directors for the brownfield renewal authority pursuant to RCW 70.105D.160; - Now, Therefore,

BE IT RESOLVED by the Spokane City Council that the geographic area identified in the map attached as Exhibit No. 2 shall be designed as the Riverfront Park Redevelopment Opportunity Zone (RFP ROZ) and that the RFP ROZ meets the following determinations as required by RCW 70.105D.150:

(a) At least fifty percent of the upland properties in the RFP ROZ are brownfield properties as defined in RCW 70.105D.020 (3) whether or not the properties are contiguous;

(b) The upland portions of the RFP ROZ are comprised entirely of parcels of property either owned by the city or whose owner has provided consent in writing to have their property included within the RFP ROZ;

(c) The cleanup of the RFP ROZ, as brownfield properties, will be integrated with the implementation of the Riverfront Park Master Plan for the future uses of the properties and is consistent with the comprehensive land use plan for the RFP ROZ; and

(d) The proposed properties lie within boundaries of the City of Spokane and are within the urban growth area designated under RCW 36.70A.110.

BE IT FURTHER RESOLVED by the Spokane City Council that the Spokane Park Board Renewal Authority is hereby established pursuant to RCW 70.105D.160 for the purpose of guiding and implementing the cleanup and redevelopment of the properties with the Riverfront Park Redevelopment Opportunity Zone.

BE IT FURTHER RESOLVED by the Spokane City Council that the board of directors for the Spokane Park Board Renewal Authority shall consist of the Spokane Park Board as it currently exists and as reconstituted from time to time by subsequent appointments. The Spokane Park Board Renewal Authority shall have those powers set forth in chapters 39.34 RCW and 70.105D RCW.

ADOPTED BY THE CITY COUNCIL ON \_\_\_\_\_

City Clerk

Approved as to form:

Assistant City Attorney

#### INTRODUCTION

1

The purpose of this document is to describe the concept for establishing a Redevelopment Opportunity Zone (ROZ) to align with the ongoing redevelopment efforts by the City of Spokane (the City) and the Spokane Park Board (Parks) within Riverfront Park. This new policy tool was enacted as part of a reform bill to the Model Toxics Control Act (MTCA) enacted by Senate Bill 5296. The fundamental principle of the brownfield reforms is to support efforts that leverage market redevelopment forces to drive cleanup projects forward. As a complement to the traditional enforcement-based approach to cleanup, the brownfield redevelopment focused approach creates incentives to reduce risk and improve the financial feasibility of adaptive re-use of contaminated properties.

2016

A few facts about cleanup of contaminated properties in Washington State underscore the need for this innovation in public policy:

- Nearly 12,000 contaminated properties have been reported to the Department of Ecology and cleanup has been completed at only approximately 6,000
- On average, 150 completed cleanups are approved per year, but 300 new sites are identified, so the inventory of contaminated sites is increasing by 150 sites each year.
- A typical brownfield remediation project takes 4 years to complete the regulatory process under the Voluntary Cleanup Program and 5 years under the formal program. These average time cycles are getting longer every year. Larger and more complex projects take even longer.
- Financial modeling of case studies in Washington State estimates that cleanup leverages redevelopment investments and multiplier effects to drive job creation at the rate of 1 job per \$15,000 to \$59,000 of remediation costs.
- The multiplier benefits of every \$1 of state cleanup grant are estimated to drive \$6 in local tax revenue, \$7 in payroll revenue, and \$32 in business revenue.

Riverfront Park is Spokane's premier great example of the brownfield reuse. Riverfront Park occupies 100 acres of land and water in the center of downtown Spokane. The Spokane Falls and the surrounding land had long been a gathering place for people. Native Americans gathered and fished at

#### **Results Washington**

Governor Inslee launched a new government performance and accountability program called Results Washington. The program identifies major goals for state government programs, establishes numeric goals, and tracks progress. Results Washington includes two brownfield related goals

- Complete 988 cleanups by 2020
- Redevelop 165 brownfields by 2016

the falls. In the late 1800s, pioneers settled here and started the city of Spokane. The railroad industry fueled the city's growth and rail yards covered Havermale Island, the present site of Riverfront Park.

In 1974, Spokane hosted Exposition '74, "The World's Fair." In preparation for Expo '74, the Spokane River was cleaned up, the rail yards were removed, and the Great Northern Railroad Depot on Havermale Island was demolished. The Clocktower is all that remains of the 1902 depot.

While there have been various changes and improvements to the Park since Expo '74, there has not been a comprehensive look at the Park in its entirety since 1973. In 2012, the City of Spokane Parks and Recreation Department launched the initial stages of the present Master Plan. A public survey was distributed and public outreach conducted. The result was a broad look at the Park, its potential uses and potential programmatic zones. The Riverfront Park Master Plan 2014 aims to clarify this overall vision and define specific uses for the Park as Spokane looks to the next 40 years.

#### **Master Plan's Five Major Components**

The following list depicts the primary development priorities for the Park, and forms the recommended capital distribution for a potential \$64.3 million bond. \$4.3 Million would be authorized in order to pay debt service in the first five years of a 20-year bond. Voters approved the bond fall 2014. Riverfront Park Memories - Raymond Reyes https://www.youtube.com/watch?v=rKd59ErVzYs

- 1. Playgrounds
- 2. U.S. Pavilion/Event Center and Park Shelters
- 3. Improved Looff Carrousel Building
- 4. Improved and Relocated Ice Rink
- 5. Public Spaces & Park Grounds

# City of Spokane & Spokane Park Board's Riverfront Park Brownfield Redevelopment Opportunity Zone Eligibility Determination

The following list is the Spokane Park Board's second tier of development priorities. The Spokane Park Board along with Park Staff will continue to look for outside funding sources at the Federal, State and private sector levels for the following:

- Clock Tower Upgrade/Viewing Tower Access
- Remaining Bridge Upgrades & Improvements
- Charles Looff Interactive Museum
- Sculpture Garden

Establishing the Park as a in the heart of downtown Spokane on the banks of the beautiful Spokane River and Falls will create benefits for the City and Parks in completing remedial actions.

# PURPOSE AND DEFINITIONS

A ROZ is an area designated by a port, city or county that is characterized by brownfield conditions. SB 5296 explicitly directs the Department of Ecology to prioritize funding resources in ROZ and allows a number of new tools that are only authorized for use in these zones. The ROZ concept builds on existing successful models, including industrial development districts, empowerment zones as well as the Community Development Act and the Interlocal Cooperation Act.

A ROZ can consist of one or more properties and can vary in size, but must meet the following criteria. The ROZ must be established through a city, county, or port commission resolution stating that these criteria are met. Notably, the legislation does not explicitly require Ecology review or approval of a ROZ. The following analysis demonstrates that designation criteria are met.

# PROPOSED GEOGRAPHIC EXTENT OF RIVERFRONT PARK (RFP) ROZ

The proposed geographic extent of the RFP ROZ focuses on the City-owned public Riverfront Park. Riverfront Park is Spokane's premier example of the brownfield reuse. Riverfront Park occupies 100 acres of land and water in the center of downtown Spokane. The Spokane Falls and the surrounding land had long been a gathering place for people. Native Americans gathered and fished at the falls. In the late 1800s, pioneers settled here and started the city of Spokane. The railroad industry fueled the city's growth and rail yards covered Havermale Island, the present site of Riverfront Park. It is the intent of the City to expand the ROZ over time to include additional privately owned properties in the vicinity to assist in cleanup of economically viable private property. Based adjacent cleanup efforts at Kendall Yards (downstream and River Point Campus (upstream), Phase I report, and the contamination discovered during early construction of the new Ice Ribbon the City expects that other properties near Riverfront Park and the entire Park will meet the state definition of a brownfield and allow for future expansion of the ROZ. To demonstrate the potential benefits of the ROZ and move it from concept to reality, the City and Parks will initially establish it with these parcels, then conduct further outreach and engagement with adjacent property owners.

#### **ROZ Designation Criteria**

SB 5296 requires that the following criteria be met in order to establish a ROZ:

- At least fifty percent of the upland properties in the zone are brownfield properties whether or not the properties are contiguous
  - <u>Assumption</u>: The legislation does not clearly define whether the percentage of brownfields refers to number of parcels or the land area.
  - Number of Parcels—The Riverfront Park ROZ includes multiple parcels: 35181.0032, 35181.4406, 35181.4409, 35183.0057, 35183.0065, 35183.1422, 35183.1423, 35183.1434, 35183.1435, 35183.1437, 35184.0069, 35185.0041, 35185.0076, 35185.0077 (See attached map).
    - Potential Proximal Parcels—35184.0026 35185.0053 are owned by Avista Corporation and could be included as the ROZ is expanded.
  - Land Area— The Riverfront Park ROZ includes approximately 100 acres of upland property that all meet the brownfield definition. Based on this measure, the ROZ meets this criterion.
- The upland portions of the zone are comprised entirely of parcels of property either owned by the designating agency (port, city or county) or whose owner has provided consent in writing to have their property included within the zone
  - <u>Assumption:</u> The term 'upland' is assumed to be real property above the ordinary high water mark
  - The City and Parks owns all of the properties in the proposed ROZ

- The cleanup of brownfield properties will facilitates the implementation of the voter approved Redevelopment Master Plan for the future uses of the properties and is consistent with the city or county comprehensive land use plan for the zone; and
  - <u>Assumption:</u> The on-going implementation of the Master Plan requires unplanned remediation, which will be funded outside the \$60 Million dollar redevelopment bond as much as possible. The intent is to pursue EPA Cleanup grant funds, Ecology Remedial Action grant funds as well as State ROZ trust fund assistance.
- The proposed properties lie within the incorporated area of a city or within an urban growth area
  - Riverfront Park lies entirely within the Spokane City limits.

# Definition of a Brownfield

SB 5296 includes a definition for a brownfield (which was previously lacking in MTCA). Designating a ROZ will require making a determination that at least 50% of the properties meet this definition:

"Brownfield property" means previously developed and currently abandoned or underutilized real property and adjacent surface waters and sediment where environmental, economic, or community reuse objectives are hindered by the release or threatened release of hazardous substances that the department has determined requires remedial action under this chapter or that the United States environmental protection agency has determined requires remedial action under the federal cleanup law.

The definition establishes three criteria that must be met for a property to be considered a brownfield:

1. Property has been previously developed

In 1974, Spokane hosted Exposition '74, "The World's Fair." In preparation for Expo '74, the Spokane River was cleaned up, the rail yards were removed, and the Great Northern Railroad Depot on Havermale Island was demolished. The Clocktower is all that remains of the 1902 depot. While there have been various changes and improvements to the Park since Expo '74

2. Property is currently abandoned or underutilized.

- This criterion is met by the fact that Riverfront Park though the City's premier park and the past site of the 1974 World's Fair has not seen any significant upgrades or redevelopment since Expo '74
- 3. Release or threatened release of hazardous substances.
  - A Phase I Environmental Site Assessment of the Riverfront park property has identified a number of recognized environmental conditions, including:
    - Mining in the Coeur D'Alene Basin has contaminated stretches of the Spokane River with arsenic, cadmium, lead, and zinc (heavy metals). Portions of the subject property border, or are surrounded by, the Spokane River. Because of likely contamination of sediments in the Spokane River and its proximity to the subject property, the identified Spokane River area-wide metals contamination is considered a REC to the subject property.
    - *Historical occupants of the subject property are considered RECs. These occupants include:* 
      - o Railroads,
      - Laundries and drycleaners,
      - Various types of mills and factories,
      - An asphalt plant,
      - Lumber yards,
      - Foundries,
      - o Iron works,
      - Power companies,

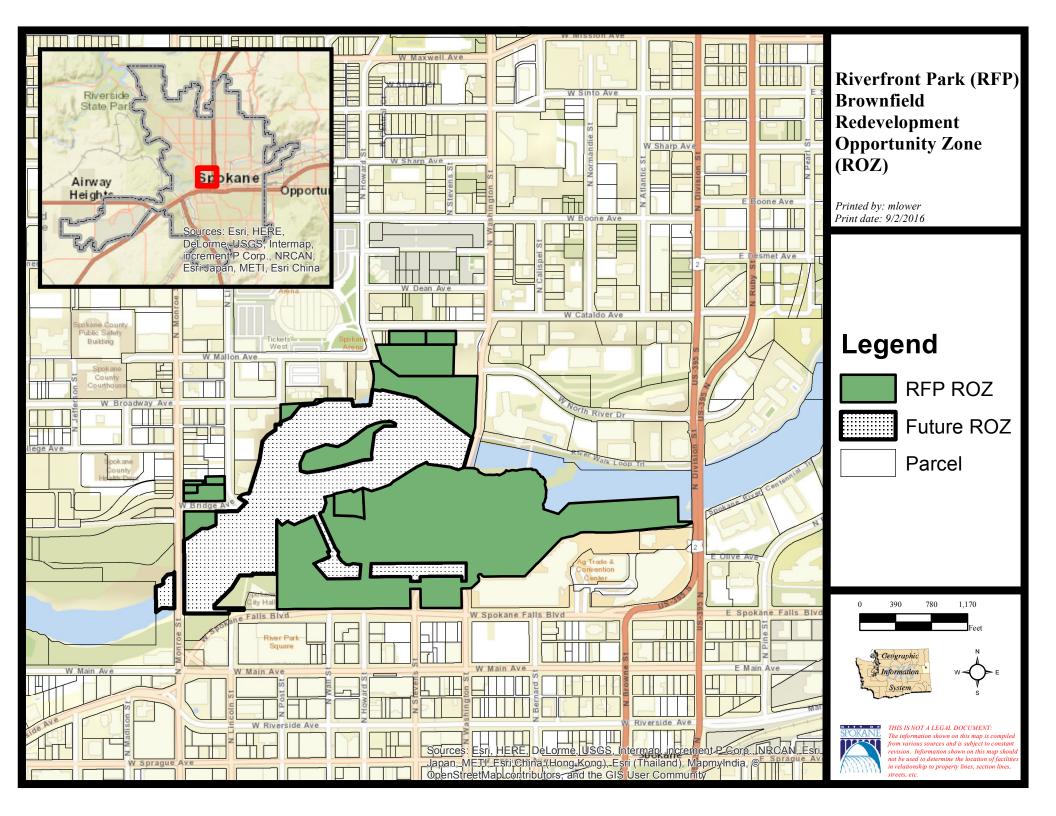
- Machine shops,
- Pottery shops,
- Auto service stations,
- Seed companies,
- Coal storage, and
- Other occupants with chemical storage facilities and/or USTs and AS
- The presence and unknown source of large amounts of fill material located throughout the subject property, as well as the possibility that debris from the fire of 1889 is located throughout fill material on the subject property, represent a REC to the subject property.
- The staining observed near a floor drain inside the containment area located under the large compressor in the ice rink compressor room represent a REC to the subject property.
- The leaking piping or fill port in the ice rink area on the subject property represents a REC to the subject property.
- The lack of documentation regarding the removal of the two, 1,000-gallon and one, 250gallon underground storage tanks (USTs) located at the Boschs Service site represents a REC to the subject property.
- The historic use of and need for additional assessment at the Spokane City Central Park Maintenance

levels, represent a REC to the subject property.

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- Pro site, as well as the lack of documentation regarding the USTs or ASTs at the site, and the presence of multiple contaminants, some at concentrations greater than cleanup
- The presence of soil and groundwater contamination greater than cleanup levels at the Anthony's Restaurant (formerly Salty's on the Falls) property represents a REC to the subject property.
- The presence of groundwater contamination greater than cleanup levels at the Continental Baking Company site represents a REC to the subject property.
- The documentation of many activities which could result in soil and/or groundwater contamination at the Carnation Dairy portion of the Carnation Dairy site represents a REC to the subject property.
- The lack of documentation regarding the removal or fate of the 2,000- and 6,000-gallon USTs on the Dairy Garage portion of the Carnation Dairy site represents a REC to the subject property.
- The presence of floor drains and sumps and sediment/sludge with strong petroleum odor present near and inside these structures on the Dairy Garage portion of the Carnation Dairy site represents a REC to the subject property.
- The presence of soil and groundwater contamination greater than MTCA cleanup levels on the Dairy Garage portion of the Carnation Dairy site represent a REC to the subject property.
- The presence of soil contamination greater than MTCA cleanup levels on the parking area portion of the Carnation Dairy site represents a REC to the subject property.
- The presence of soil and historic groundwater contamination greater than cleanup levels at the Convention Center site represents a REC to the subject property.
- The uncertainty regarding possible groundwater contamination at the Upper Falls East/Old Joe Clark's site represents a REC to the subject property.
- April 27, 2016, WA State Department of Ecology accepted the Parks and Recreation Division's Voluntary Cleanup Program (VCP) application, following geotech and environmental testing in preparation for the construction of the "Ice Ribbon"
  - Environmental testing indicated the presence of PAHs, arsenic, cadmium and lead above MTCA Method A cleanup criteria. Lube oil range hydrocarbons could also be present greater than MTCA Method A Cleanup Criteria. Multiple infrastructure

projects are planned for Riverfront Park. Projects will include earthwork (excavation and filling) and modifications to existing stormwater disposal methods within areas identified to have contamination greater than MTCA Method A cleanup criteria.



# City of Spokane Briefing Paper **Planning Brownfields Program: Riverfront Park Redevelopment Opportunity Zone & Funding Pursuits**

September 19, 2016

### Subject

Create the State's 3<sup>rd</sup> Redevelopment Opportunity Zone (ROZ) in Riverfront Park to align with the ongoing redevelopment efforts by the City of Spokane (the City) and the Spokane Park Board (Parks) within Riverfront Park.

### Background

This new policy tool was enacted as part of a reform bill to the Model Toxics Control Act (MTCA) enacted by Senate Bill 5296. The fundamental principle of the brownfield reforms is to support efforts that leverage market redevelopment forces to drive cleanup projects forward. As a complement to the traditional enforcement-based approach to cleanup, the brownfield redevelopment focused approach creates incentives to reduce risk and improve the financial feasibility of adaptive re-use of contaminated properties. Eligibility Determination, Resolution, and Map are attached.

A ROZ is an area designated by a port, city or county that is characterized by brownfield conditions. SB 5296 explicitly directs the Department of Ecology to prioritize funding resources in ROZ and allows a number of new tools that are only authorized for use in these zones. The ROZ concept builds on existing successful models, including industrial development districts, empowerment zones as well as the Community Development Act and the Interlocal Cooperation Act.

A ROZ can consist of one or more properties and can vary in size, but must meet the following criteria. The ROZ must be established through a city, county, or port commission resolution stating that these criteria are met. Notably, the legislation does not explicitly require Ecology review or approval of a ROZ. The following analysis demonstrates that designation criteria are met. Results Washington

> Governor Inslee launched a new government performance and accountability program called Results Washington. The program identifies major goals for state government programs, establishes numeric goals, and tracks progress. Results Washington includes two brownfield related goals

- Complete 988 cleanups by 2020
- Redevelop 165 brownfields by 2016

#### Recommendations

Approve the creation of the Riverfront Park Brownfield Redevelopment Opportunity Zone and approve the pursuit of State and Federal grants this fall and next year to align necessary funding with remedial activities to occur during park redevelopment.

# CITY OF SPOKANE

# SOUTH CHANNEL BRIDGE REPLACEMENT PROJECT

# Supplement #5 EXHIBIT A: SCOPE OF WORK

#### INTRODUCTION

On July 30th, 2014, CH2M HILL Engineers, Inc. (CONSULTANT) was selected to provide professional services for the South Channel Bridge Replacement Project (PROJECT).

This scope of work includes professional services to provide additional design and permitting services as requested by the City of Spokane (CITY) related to the Howard Street South Channel Bridge Project. This work includes professional services to provide:

- Task 8.5 Additional coordination, research, and development of a Memorandum of Agreement (MOA) with DAHP/USACE to provide Section 106 mitigation under the National Historic Preservation Act. The original agreement (SOW, dated April 1, 2015, Task 8.5) assumed "no adverse effect of historic properties under Section 106 from the replacement of the South Channel Bridge." During project development, the project area was determined to be historically significant by DAHP/USACE, due to the South Channel Bridge being a contributing resource to Expo '74, and mitigation was determined to be required for replacement of the bridge.
- **Task 8.6** Additional coordination and permitting services to procure permits that are typically obtained by the Contractor to include the Site Development Permit, Construction Stormwater General Permit, and Storm Water Pollution and Prevention Plan.
- Task 11.3 Additional design, design revisions and coordination for project stormwater management collection, treatment and disposal facilities. The original agreement (SOW, dated April 1, 2015, Task 11.3) assumed "ability to tie to existing stormwater treatment/disposal facilities. No new treatment/disposal facilities are included in the design." Discovery of impacted and contaminated soils on the project required coordination and development of new stormwater treatment and disposal.

Based on the above assumptions and under this project, CONSULTANT will provide to the CITY the scope of services as specified herein. The PROJECT scope of work includes the following tasks:

Task 1:	Project Management and Coordination
Task 8:	Environmental Documentation and Permitting
Task 11:	Final Approach, Storm Drainage and Utilities Design



### **1.0 PROJECT MANAGEMENT & COORDINATION**

CONSULTANT will provide project management and coordination with the City. Project management services include:

- Staffing and management
- Management of budget and schedule
- Routine communication and coordination with the City.

#### Task 1.0 Assumptions:

Invoicing and progress reporting are accounted for in Amendment #4, Task CM.01.
 No additional efforts are included in this scope.

### 8.0 ENVIRONMENTAL COORDINATION, DOCUMENTATION AND PERMITTING

#### 8.5. Environmental Documentation

#### 8.5.4. Section 106/Historic Resources Mitigation

DAHP and USACE have determined that the South Channel Bridge is a component of a significant local historical event – Expo '74. As such, mitigation for removal of the bridge will be required as determined by a MOA between the consulting parties (DAHP, USACE, Spokane Tribe of Indians, the Spokane Preservation Advocates, and the Washington Trust for Historic Preservation) and the CITY.

CONSULTANT will prepare an initial draft of the MOA to develop and agree upon the mitigation framework for removal of the bridge. CONSULTANT will participate at up to five MOA coordination meetings with the consulting parties and the CITY. The CONSULTANT will aid in scheduling, will coordinate with and advise the CITY's Historic Preservation Officer (HPO) and the Riverfront Park Program Manager, will participate at up to five CITY coordination internal meetings to discuss the CITY's negotiating position for presenting at the MOA meetings, and will assist with re-writing the MOA text that represents those negotiation positions. Two CONSULTANT representatives will attend each meeting, the permitting manager and the historic preservation specialist. Each meeting is assumed to be two hours in duration.

This task includes preparation of historic property inventory forms that were not included in the original scope of work, preparation of a complex inventory form related to the historic district, and incorporation of the additional information into the Historic Inventory Report.

This task also includes updating the Area of Potential Effects (APE) letter for historic resources to DAHP caused by project changes (incorporation of the Theme Stream into the bridge project), the APE letter for archeology for the Spokane Tribe of Indians, addressing the NRHP historic district resources (Expo '74 features) rather than just resources over 45 years old, and coordination with DAHP.



#### Task 8.5.4 Assumptions:

- + USACE is responsible for routing the agreed-upon MOA for signatures.
- + CH2M is not responsible for project schedule delays caused by the consulting parties

#### Task 8.5.4 Deliverables:

MOA for the South Channel Bridge

#### 8.6. Joint Aquatic Resources Permit Application (JARPA)

#### 8.6.3. Additional Local Permitting

In order to expedite startup timing for the South Channel Bridge Contractor, the CITY directed the CONSULTANT to develop the following additional permits that are typically contractor-procured.

#### **Environmental Permits**

Permit or Approval	Agencies
Construction Stormwater General Permit (CSWGP)	Washington State Department of Ecology (DOE)
Site Development Permit (SDP)	City of Spokane
Stormwater Pollution and Prevention Plan (SWPPP)	City of Spokane

**CSWGP.** The CONSULTANT will prepare required documentation and submit the online Notice of Intent (NOI) request. The CONSULTANT will prepare and advertise the Public Notice two times in the Spokesman Review. The CONSULTANT will coordinate with DOE and the CITY to facilitate the permitting process, which includes three (3) meetings with Ecology.

**SDP.** The CONSULTANT will prepare required documentation (application, plans, specifications, erosion control and sediment plan (SEC Plan) and drainage report) and submit to the CITY during an intake meeting. The CONSULTANT will coordinate with the CITY to facilitate the permitting process.

**SWPPP.** The CONSULTANT will prepare the SWPPP using the CITY's template and BMP examples. THE CONSULTANT will coordinate the SWPPP with the City for acceptance.

#### Task 8.6.3 Assumptions:

- This scope of work does not cover any design changes that may be required as a result of requirements from these permits. Design changes will be accomplished based on negotiation of additional work with the City.
- + CITY will reimburse CONSULTANT for all expenses associated with application, and advertisement for permits. CONSULTANT expenses include only costs for advertisement (2 times) for the CSWGP in the Spokesman Review.



 Assumed that two (2) members of the CONSULTANT team will attend each of the three (3) meetings with Ecology. A total of two hours of effort is assume for each meeting, per person.

#### Task 8.6.3 Deliverables:

- + Documentation and online NOI for CSWGP.
- + CSWGP Public Notice in Spokesman Review (two times).
- + SDP documentation and application.
- + SWPPP

#### 11.0 FINAL APPROACH, STORM DRAINAGE, AND UTILITIES DESIGN

#### 11.3. Drainage and Utility Plans

The CONSULTANT will coordinate with the City and WA Dept. of Ecology (DOE) to develop treatment and disposal facilities for the South Channel Bridge and Temporary Construction Access Route. A total of three (3) meetings with (DOE) and two meetings with the City are anticipated. Two (2) CONSULTANT team members will attend each meeting. A total of two (2) hours per meeting, per person are anticipated.

The CONSULTANT will revise the drainage design for the South Channel Bridge site to include design of BMPs for treatment and disposal of project stormwater. The CONSULTANT will coordinate revised approach with the CITY and DOE as required.

The CONSULTANT will revise the drainage report to include revised approach to include BMPs for treatment and disposal of project stormwater.

The CONSULTANT will develop special provisions to include BMPs for treatment and disposal of project stormwater.

#### Task 11.3 Deliverables:

+ Revised plans, specifications, and drainage report for final bid set submittal.

# City of Spokane - Howard St. S. Channel Bridge Replacement, Supplement #5 Exhibit B: Fee Determination Summary

Employee or Category			Hrs.	х		Rate =	Cost
Project Manager			24		\$	70.57	\$1,693.60
Senior QC Engineer			40		\$	60.78	\$2,431.20
Lead Bridge Engineer			0		\$	70.12	\$0.0
Bridge Structural Engineer			Ō		\$	57.57	\$0.0
Bridge Inspector			0		\$	51.48	\$0.0
Senior Civil/Electrical Engineer			64		\$	55.46	\$3,549.4
Civil/Electrical Engineer			76		\$	43.27	\$3,288.5
Lead Geotechnical Engineer			0		\$	45.18	\$0.0
•			0		э \$	40.97	\$0.0
Senior CADD Designer/Technic			-		э \$	21.10	+
Junior CADD Designer/Technic			0			-	\$0.0 \$377.5
Project Accountant / Controls / I	Procui	rement	12		\$	31.46	* - · · · -
Project Administrative	-		8		\$	25,20	\$201.6
	T	Fotal Hrs.	544				\$28,200.8
Direct Labor Cost							\$28,200.8
Direct Labor Escalation Cost 2017 (50% Labor)	(estin	nated)				4.0%	\$564.0
Total Direct Labor Cost							\$28,764.8
Overhead Cost @ 107.0	07% c	of Direct Labor					\$30,798.5
· · · · · · · · · · · · · · · · · · ·		of Direct Labor					\$8,917.1
Total Overhead & Fixed Fee C	ost						\$39,715.6
Total Overhead & Fixed Fee C Total Direct Labor Cost	ost						
	ost						
Total Direct Labor Cost	ost	No.	Each			Cost	
Total Direct Labor Cost Reimburseables	ost						
Total Direct Labor Cost Reimburseables Reprographics	Cost	0	\$60			\$0.00	
Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc.		0	\$60 \$35			\$0.00 \$0.00	
Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage	0	0 0 Mi. @	\$60 \$35 \$0.56	/Mile		\$0.00 \$0.00 \$0.00	
Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage Auto Rental/Fuel	0	0 0 Mi. @ days @	\$60 \$35 \$0.56 \$75	/Mile /day		\$0.00 \$0.00 \$0.00 \$75.00	
Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging	0	0 0 Mi. @ days @ days @	\$60 \$35 \$0.56 \$75 \$130	/Mile /day		\$0.00 \$0.00 \$0.00 \$75.00 \$260.00	
Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs	0	0 0 Mi. @ days @ days @ 0	\$60 \$35 \$0.56 \$75 \$130 \$20	/Mile /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00	
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc)	0 1 2	0 0 Mi. @ days @ days @ 0 2	\$60 \$35 \$0.56 \$75 \$130 \$20 \$375	/Mile /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00	
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS	0 1 2	0 0 days @ days @ 0 2 0	\$60 \$35 \$0.56 \$75 \$130 \$20 \$375 \$425	/Mile /day /day /Trip		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00	
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking	0 1 2	0 0 days @ days @ 0 2 0 2	\$60 \$35 \$0.56 \$130 \$20 \$375 \$425 \$15	/Mile /day /day /Trip /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00	
Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking	0 1 2	0 0 days @ days @ 0 2 0	\$60 \$35 \$0.56 \$130 \$20 \$375 \$425 \$15	/Mile /day /day /Trip		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00	
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment	0 1 2	0 0 Mi. @ days @ 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0	\$60 \$35 \$0.56 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00	/Mile /day /day /Trip /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00	
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment	0 1 2	0 0 Mi. @ days @ 0 2 0 2 0 2 0 2 0	\$60 \$35 \$0.56 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00 \$1.10	/Mile /day /day /Trip /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00 \$143.00	
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment Health & Safety	0 1 2	0 0 Mi. @ days @ 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0	\$60 \$35 \$0.56 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00	/Mile /day /day /Trip /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00	
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment Health & Safety UBIV Rental	0 1 2	0 0 Mi. @ days @ 0 2 0 2 days @ 0 130	\$60 \$35 \$0.56 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00 \$1.10	/Mile /day /day /Trip /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00 \$143.00	
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment Health & Safety UBIV Rental Traffic Control	0 1 2	0 0 Mi. @ days @ 0 2 0 2 days @ 0 130 0	\$60 \$35 \$0.56 \$75 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00 \$1.10 \$2,000	/Mile /day /day /Trip /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00 \$143.00 \$0.00	
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing	0 1 2	0 0 Mi. @ days @ 0 2 0 2 days @ 0 130 0 0 0	\$60 \$35 \$0.56 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00 \$1.10 \$2,000 \$1,270 \$4,800	/Mile /day /day /Trip /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00 \$143.00 \$0.00 \$0.00	
Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing Utility Locating	0 1 2	0 0 days @ days @ 0 2 0 2 days @ 0 130 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 \$75 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00 \$1.40 \$1,270 \$4,800 \$1,500	/Mile /day /day /Trip /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing Utility Locating Coring and Patching	0 1 2 2	0 0 days @ days @ 0 2 0 2 days @ 0 130 0 0 0 0 0	\$60 \$35 \$0.56 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00 \$1.10 \$2,000 \$1,270 \$4,800	/Mile /day /day /Trip /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00	\$68,480.5
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing Utility Locating Coring and Patching Project Communications Service	0 1 2 2	0 0 days @ 0 2 0 2 days @ 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 \$75 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00 \$1.10 \$2,000 \$1,270 \$4,800 \$1,500 \$6,000	/Mile /day /day /Trip /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$150.00 \$143.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$68,480.5
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing Utility Locating Coring and Patching Project Communications Service	0 1 2 2	0 0 days @ 0 2 0 2 days @ 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 \$75 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00 \$1.10 \$2,000 \$1,270 \$4,800 \$1,500 \$6,000	/Mile /day /day /Trip /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$150.00 \$143.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$143.00 \$0.000 \$0.000 \$0.000 \$0.000\$00 \$0.000\$000\$	\$68,480.5
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing Utility Locating Coring and Patching Project Communications Service	0 1 2 2	0 0 days @ 0 2 0 2 days @ 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 \$75 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00 \$1.10 \$2,000 \$1,270 \$4,800 \$1,500 \$6,000	/Mile /day /day /Trip /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$143.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	<b>\$68,480.5</b> \$2,268.4
Total Direct Labor Cost Reimburseables Mail/Deliveries/etc. Mileage Auto Rental/Fuel Lodging Aerial Photographs Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing Utility Locating Coring and Patching Project Communications Service	0 1 2 2	0 0 days @ 0 2 0 2 days @ 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 \$75 \$130 \$20 \$375 \$425 \$15 \$75 \$140.00 \$1.10 \$2,000 \$1,270 \$4,800 \$1,500 \$6,000	/Mile /day /day /Trip /day /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$150.00 \$143.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$143.00 \$0.000 \$0.000 \$0.000 \$0.000\$00 \$0.000\$000\$	\$39,715.6 \$68,480.5 \$2,268.4 \$2,268.4 \$0.00 \$2,268.4

# Total (rounded)

# \$70,749

Project Summary By Task City of Spokane - Howard St. S. Channel Bridge Replacement, Supplement #5

Task	Cł	12M HILL Hours	CH2M HILL Labor	Subcontracts	Reimburseables	Overall Total
1.0 Project Management and Coordination		36	\$4,148	\$0	\$0	\$4,148
8.0 Environmental Coordination, Documentation and Permitting		380	\$48,413	\$0	\$1,408	\$49,821
11.0 Final Approach, Storm Drainage, and Utilities Design		128	\$15,919	\$0	\$860	\$16,779
Te	otal	544	\$68,481	\$0	\$2,268	\$70,749

1.0110j0	ct Manager	nent and C	oora	mation	
CH2M HILL					
Employee or Category		Hrs. x			= Cost
Principal In Charge		0	\$	106.43	\$0.00
Project Manager		16	\$	70.57	\$1,129.12
Senior QC Engineer		0	\$	60.78	\$0.00
Lead Bridge Engineer		0	\$	70.12	\$0,00
Bridge Structural Engineer		0	\$	57.57	\$0.00
Bridge Inspector		0	\$	51.48	\$0.00
Senior Civil/Electrical Engineer		0	\$	55.46	\$0.00
Civil/Electrical Engineer		0	\$	43.27	\$0,00
Lead Geotechnical Engineer		0	\$	45.18	\$0.00
Lead Geologist		0	\$	49.64	\$0.00
Lead Environmental Scientist		0	\$	64.23	\$0.00
Senior Biologist / Scientist / Planner / H	listorian	0	\$	47.31	\$0.00
Biologist/Archeologist/Historian		0	\$	26.97	\$0.00
Senior CADD Designer/Technician		0	\$	40.97	\$0.00
Junior CADD Designer/Technician		0	\$	<b>21</b> .10	\$0.00
Pubs/Edit/Graphic Tech		0	\$	42.15	\$0.00
Project Accountant / Controls / Procure	ement	12	\$	31.46	\$377.52
Project Administrative		8	\$	25.20	\$201.60
-	Total Hrs.	36			\$1,708.24
Direct Labor Cost					\$1,708.24
Direct Labor Escalation Cost (estim 2017 (50% Labor)	ated)			4.0%	\$34.16
Total Direct Labor Cost					\$1,742.40
	of Direct Labor				\$1,865.59
-	of Direct Labor				\$1,865.55
Total Overhead & Fixed Fee Cost					\$2,405.74
					· · · ·
Total Direct Labor Cost					\$4,148.14
Reimburseables					8.
	No.	Each		Cost	
Reprographics	0	¢60		\$0.00	
Mail/Deliveries/etc.		\$60		* * -	
	0	\$35		\$0.00	
Mileage 0	0 Mi. @	,	•		
Mileage 0 Auto Rental/Fuel 0		\$35		\$0.00	
0	Mi. @ days @	\$35 \$0.56 /Mile		\$0.00 \$0.00	
Auto Rental/Fuel 0	Mi. @	\$35 \$0.56 /Mile \$75 /day		\$0.00 \$0.00 \$0.00	
Auto Rental/Fuel 0 Lodging 0	Mi. @ days @ days @	\$35 \$0.56 /Mile \$75 /day \$130 /day		\$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial Photographs	Mi. @ days @ days @ 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial PhotographsTransport (airfare, train, etc)	Mi. @ days @ days @ 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial PhotographsTransport (airfare, train, etc)Equipment Rentals, EDM, GPS	Mi. @ days @ days @ 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)0Equipment Rentals, EDM, GPSParking0	Mi. @ days @ days @ 0 0 0 0 0 days @	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)0Equipment Rentals, EDM, GPSParking0Per Diem0Survey Equipment0	Mi. @ days @ days @ 0 0 0 0 days @ 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)0Equipment Rentals, EDM, GPSParking0Per Diem0Survey Equipment0Health & Safety	Mi. @ days @ 0 0 0 0 0 0 days @ 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)1Equipment Rentals, EDM, GPS0Parking0Per Diem0Survey Equipment0Health & Safety0UBIV Rental0	Mi. @ days @ 0 0 0 0 0 0 days @ 0 0 0 0 0 0 0 0 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)1Equipment Rentals, EDM, GPS0Parking0Per Diem0Survey Equipment0Health & Safety0UBIV Rental1Traffic Control1	Mi. @ days @ 0 0 0 0 0 0 days @ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$15 /day \$140 \$1.10 \$2,000 /day \$1,270 /day		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)1Equipment Rentals, EDM, GPS0Parking0Per Diem0Survey Equipment0Health & Safety0UBIV Rental1Traffic Control0Materials Testing0	Mi. @ days @ 0 0 0 0 0 0 days @ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$15 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)1Equipment Rentals, EDM, GPS0Parking0Per Diem0Survey Equipment0Health & Safety0UBIV Rental1Traffic Control0Materials Testing0Utility Locating0	Mi. @ days @ 0 0 0 0 0 days @ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$15 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)1Equipment Rentals, EDM, GPS0Parking0Per Diem0Survey Equipment0Health & Safety0UBIV Rental1Traffic Control1Materials Testing0Utility Locating0Coring and Patching1	Mi. @ days @ 0 0 0 0 0 days @ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)1Equipment Rentals, EDM, GPS0Parking0Per Diem0Survey Equipment0Health & Safety0UBIV Rental1Traffic Control0Materials Testing0Utility Locating0	Mi. @ days @ 0 0 0 0 0 days @ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$15 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)Equipment Rentals, EDM, GPSParking0Per Diem0Survey Equipment0Health & SafetyUBIV RentalTraffic ControlMaterials TestingUtility LocatingCoring and PatchingProject Communications ServicesSubcontracts	Mi. @ days @ 0 0 0 0 0 days @ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)Equipment Rentals, EDM, GPSParking0Per Diem0Survey Equipment0Health & Safety0UBIV Rental1Traffic Control4Materials Testing0Utility Locating0Coring and Patching1Project Communications ServicesSubcontracts1The Berger Partnership	Mi. @ days @ 0 0 0 0 0 days @ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00	\$0.00
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)Equipment Rentals, EDM, GPSParking0Per Diem0Survey Equipment0Health & SafetyUBIV RentalTraffic ControlMaterials TestingUtility LocatingCoring and PatchingProject Communications ServicesSubcontracts	Mi. @ days @ 0 0 0 0 0 days @ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00	\$0.00
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)Equipment Rentals, EDM, GPSParking0Per Diem0Survey Equipment0Health & Safety0UBIV Rental1Traffic Control4Materials Testing0Utility Locating0Coring and Patching1Project Communications ServicesSubcontracts1The Berger Partnership	Mi. @ days @ 0 0 0 0 0 days @ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00	\$0.00
Auto Rental/Fuel0Lodging0Aerial Photographs0Transport (airfare, train, etc)Equipment Rentals, EDM, GPSParking0Per Diem0Survey Equipment0Health & Safety0UBIV Rental1Traffic Control1Materials Testing0Utility Locating1Coring and Patching1Project Communications ServicesSubcontractsThe Berger Partnership Drilling Contractor	Mi. @ days @ 0 0 0 0 0 days @ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00	\$0.00 \$0.00 <b>\$0.00</b>

Total

\$4,148.14

CH2M HILL					
Employee or Category		Hrs. x		Rate =	Cost
Principal In Charge		0	\$	106.43	\$0.00
Project Manager		4	\$	70.57	\$282.28
Senior QC Engineer		16	S	60.78	\$972.48
Lead Bridge Engineer		0	S	70.12	\$0.00
Bridge Structural Engineer		0	* * * * * * * * * * * * * * * *	57.57	\$0.00
Bridge Inspector		0	S	51.48	\$0.00
Senior Civil/Electrical Engineer		24	ŝ	55.46	\$1,331.04
Civil/Electrical Engineer		16	6	43.27	\$692.32
-		0	ę	45.18	\$0.00
Lead Geotechnical Engineer			e e		
Lead Geologist		130	Ð	49.64	\$6,453.20
Lead Environmental Scientist		120	Ð	64.23	\$7,707.60
Senior Biologist / Scientist / Planner	/ Historian	30	\$	47.31	\$1,419.30
Biologist/Archeologist/Historian		40	\$	26.97	\$1,078.80
Senior CADD Designer/Technician		0	\$	40.97	\$0.00
Junior CADD Designer/Technician		0	\$	21.10	\$0.00
Pubs/Edit/Graphic Tech		0	\$	<b>42</b> .15	\$0.00
Project Accountant / Controls / Procu	irement	0	\$	31.46	\$0.00
Project Administrative		0	\$	25.20	\$0.00
-	Total Hrs.	380			\$19,937.02
Direct Labor Cost					\$19,937.02
Direct Labor Escalation Cost (estin 2017 (50% Labor)	mated)			4.0%	\$398.74
				-	<b>*</b> 20.005.70
Total Direct Labor Cost					\$20,335.76
0	Discret Labor				¢04 770 50
0	of Direct Labor				
Fixed Fee @ 31.0% of	of Direct Labor of Direct Labor			-	\$6,304.09
0				-	\$6,304.09
Fixed Fee @ 31.0% of				-	\$21,773.50 \$6,304.09 \$28,077.58  \$48,413.34
Fixed Fee @ 31.0% of 31.0\% of		5		-	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of 31.0\% of	of Direct Labor	Each		- - Cost	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables	of Direct Labor	Each \$60			\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics	of Direct Labor No. 0	\$60		\$0.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc.	of Direct Labor No. 0 0	\$60 \$35		\$0.00 \$0.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0	of Direct Labor No. 0 Mi. @	\$60 \$35 \$0.56 /Mile		\$0.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1	No. 0 Mi. @ days @	\$60 \$35 \$0.56 /Mile \$75 /day		\$0.00 \$0.00 \$0.00 \$75.00	\$6,304.09 \$28,077.58
Fixed Fee @       31.0% of the second s	No. 0 Mi. @ days @ days @	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day		\$0.00 \$0.00 \$75.00 \$260.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2	No. 0 Mi. @ days @ 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc)	No. 0 Mi. @ days @ 0 2	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc)	No. 0 0 Mi. @ days @ days @ 0 2 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc) Equipment Rentals, EDM, GPS	No. 0 Mi. @ days @ 0 2	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking	No. 0 Mi. @ days @ days @ 2 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00	\$6,304.09 \$28,077.58
Fixed Fee       31.0% of the second sec	No. 0 Mi. @ days @ 2 0 2	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem 2 Survey Equipment	No. 0 Mi. @ days @ 0 2 0 2 days @ 0 2 0 2 0 0 2 0 0 2 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem 2 Survey Equipment Health & Safety	No. 0 Mi. @ days @ days @ 2 0 2 days @ 0 2 130	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00 \$143.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Aransport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem 2 Survey Equipment Health & Safety UBIV Rental	No. 0 0 Mi. @ days @ 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 0 2 0 0 2 0 0 2 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00 \$143.00 \$0.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem 2 Survey Equipment Health & Safety UBIV Rental Traffic Control	No. 0 0 Mi. @ days @ 0 2 0 2 days @ 0 2 0 130 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day \$1,270 /day		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00 \$143.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem 2 Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing	No. 0 0 Mi. @ days @ 0 2 0 2 days @ 0 2 0 130 0 0 130 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$0.00 \$30.00 \$150.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem 2 Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing Utility Locating	No. 0 0 Mi. @ days @ 0 2 0 2 0 2 0 2 0 130 0 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$150.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58
Fixed Fee       31.0% of         Total Overhead & Fixed Fee Cost         Total Overhead & Fixed Fee Cost         Total Direct Labor Cost         Reimburseables         Reprographics         Mail/Deliveries/etc.         Mileage       0         Auto Rental/Fuel       1         Lodging       2         Aerial Photographs       2         Farking       Per Diem         Per Diem       2         Survey Equipment       Health & Safety         UBIV Rental       Traffic Control         Materials Testing       Utility Locating         Coring and Patching       1	No. 0 0 Mi. @ days @ 0 2 0 2 days @ 0 2 0 130 0 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$150.00 \$143.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58
Fixed Fee       31.0% of         Total Overhead & Fixed Fee Cost         Total Overhead & Fixed Fee Cost         Total Direct Labor Cost         Reimburseables         Reprographics         Mail/Deliveries/etc.         Mileage       0         Auto Rental/Fuel       1         Lodging       2         Aerial Photographs       2         Farking       Per Diem         Per Diem       2         Survey Equipment       Health & Safety         UBIV Rental       Traffic Control         Materials Testing       Utility Locating         Coring and Patching       1	No. 0 0 Mi. @ days @ 0 2 0 2 0 2 0 2 0 130 0 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$150.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58 \$48,413.34
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem 2 Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing Utility Locating Coring and Patching	No. 0 0 Mi. @ days @ 0 2 0 2 days @ 0 2 0 130 0 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$150.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58 \$48,413.34
Fixed Fee       31.0% of         Total Overhead & Fixed Fee Cost         Total Direct Labor Cost         Reimburseables         Reprographics         Mail/Deliveries/etc.         Mileage       0         Auto Rental/Fuel       1         Lodging       2         Aerial Photographs       2         Farking       Per Diem         Per Diem       2         Survey Equipment       Health & Safety         UBIV Rental       Traffic Control         Materials Testing       Utility Locating         Coring and Patching       Project Communications Services	No. 0 0 Mi. @ days @ 0 2 0 2 days @ 0 2 0 130 0 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$150.00 \$143.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58 \$48,413.34
Fixed Fee @       31.0% of Total Overhead & Fixed Fee Cost         Total Overhead & Fixed Fee Cost         Total Direct Labor Cost         Reimburseables         Reprographics         Mail/Deliveries/etc.         Mileage       0         Auto Rental/Fuel       1         Lodging       2         Aerial Photographs       2         Equipment Rentals, EDM, GPS         Parking       2         Per Diem       2         Survey Equipment         Heatth & Safety         UBIV Rental         Traffic Control         Materials Testing         Utility Locating         Coring and Patching         Project Communications Services	No. 0 0 Mi. @ days @ 0 2 0 2 days @ 0 2 0 130 0 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$150.00 \$0.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58 \$48,413.34
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem 2 Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing Utility Locating Coring and Patching Project Communications Services Subcontracts	No. 0 0 Mi. @ days @ 0 2 0 2 days @ 0 2 0 130 0 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58 \$48,413.34
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem 2 Survey Equipment Heatth & Safety UBIV Rental Traffic Control Materials Testing Utility Locating Coring and Patching Project Communications Services Subcontracts The Berger Partnership Drilling Contractor	No. 0 0 Mi. @ days @ 0 2 0 2 days @ 0 2 0 130 0 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$150.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58 \$48,413.34
Fixed Fee @ 31.0% of Total Overhead & Fixed Fee Cost Total Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage 0 Auto Rental/Fuel 1 Lodging 2 Aerial Photographs 2 Transport (airfare, train, etc) Equipment Rentals, EDM, GPS Parking Per Diem 2 Survey Equipment Health & Safety UBIV Rental Traffic Control Materials Testing Utility Locating Coring and Patching Project Communications Services Subcontracts The Berger Partnership	No. 0 0 Mi. @ days @ 0 2 0 2 days @ 0 2 0 130 0 0 130 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day \$20 \$375 /Trip \$425 \$15 /day \$75 /day \$140 \$1.10 \$2,000 /day \$1,270 /day \$4,800 \$1,500 \$6,000		\$0.00 \$0.00 \$75.00 \$260.00 \$0.00 \$750.00 \$30.00 \$150.00 \$143.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$6,304.09 \$28,077.58

### 8.0 Environmental Coordination, Documentation and Permitting

Total

\$49,821.34

CH2M HILL				
Employee or Category		Hrs. x	Rate =	
Principal In Charge		0	\$ 106.43	\$0.00
Project Manager		4	\$ 70.57	\$282.2
Senior QC Engineer		24	\$ 60.78	\$1,458.72
Lead Bridge Engineer		0	\$ 70.12	\$0.00
Bridge Structural Engineer		0	\$ 57.57	\$0.00
Bridge Inspector		0	\$ 51.48	\$0.00
Senior Civil/Electrical Engineer		40	\$ 55.46	\$2,218.4
Civil/Electrical Engineer		60	\$ 43.27	\$2,596.2
Lead Geotechnical Engineer		0	\$ 45.18	\$0.0
Lead Geologist		0	\$ 49.64	\$0.0
Lead Environmental Scientist		0	\$ 64.23	\$0.0
Senior Biologist / Scientist / Planne	er / Historian	õ	\$ 47.31	\$0.0
Biologist/Archeologist/Historian		õ	\$ 26.97	\$0.0
Senior CADD Designer/Techniciar		õ	\$ 40.97	\$0.0
		0	\$ 21.10	\$0.0
Junior CADD Designer/Technician				• 13
Pubs/Edit/Graphic Tech		0	\$ 42.15	\$0.0
Project Accountant / Controls / Pro	ocurement	0	\$ 31,46	\$0.0
Project Administrative		0	\$ 25.20	\$0.0
	Total Hrs.	128		\$6,555.6
Direct Labor Cost				\$6,555.6
Direct Labor Escalation Cost (es 2017 (50% Labor)	stimated)		4.0%	\$131.1
Fotal Direct Labor Cost				\$6,686.7
				+-,
• • •	6 of Direct Labor			
Fixed Fee @ 31.0%	6 of Direct Labor			\$2,072.8
•	6 of Direct Labor			\$2,072.8
Fixed Fee @ 31.09 Total Overhead & Fixed Fee Cos	6 of Direct Labor			\$7,159.46 \$2,072.86 \$9,232.34  \$15,919.06
Fixed Fee @ 31.09 Total Overhead & Fixed Fee Cos Total Direct Labor Cost	6 of Direct Labor			\$2,072.81 \$9,232.34
Fixed Fee @ 31.09 Total Overhead & Fixed Fee Cos Fotal Direct Labor Cost	6 of Direct Labor	Each	 Cost	\$2,072.8 \$9,232.3
Fixed Fee @ 31.09 Total Overhead & Fixed Fee Cos Total Direct Labor Cost Reimburseables	6 of Direct Labor st	<b>Each</b> \$60	 <b>Cost</b> \$0.00	\$2,072.8 \$9,232.3
Fixed Fee @ 31.09 Total Overhead & Fixed Fee Cos Total Direct Labor Cost Reimburseables Reprographics	6 of Direct Labor st No.			\$2,072.8 \$9,232.3
Fixed Fee @ 31.09 Fotal Overhead & Fixed Fee Cos Fotal Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc.	6 of Direct Labor st No. 0 0	\$60 \$35	 \$0.00 \$0.00	\$2,072.8 \$9,232.3
Fixed Fee @ 31.09 Fotal Overhead & Fixed Fee Cos Fotal Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage	6 of Direct Labor st No. 0 0 0 Mi. @	\$60 \$35 \$0.56 /Mile	 \$0.00 \$0.00 \$0.00	\$2,072.8 \$9,232.3
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Fixed Fee @ 31.09 Fotal Overhead & Fixed Fee Cos Fotal Direct Labor Cost Reimburseables Reprographics Mail/Deliveries/etc. Mileage ( Auto Rental/Fuel ( Lodging (	6 of Direct Labor <b>No.</b> 0 0 0 0 0 0 0 0 0 0 0 0 0	\$60 \$35 \$0.56 /Mile \$75 /day \$130 /day	 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$2,072.8 \$9,232.3
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# 11.0 Final Approach, Storm Drainage, and Utilities Design

City Clerks No.\_\_\_\_





#### CITY OF SPOKANE INTERDEPARTMENTAL REIMBURSEMENT MEMORANDUM OF UNDERSTANDING

### RE: New Riverfront Park Looff Facility Construction and the Utilities Water Main

THIS MEMORANDUM OF UNDERSTANDING ("MOU") is between the City of Spokane Parks and Recreation Department ("Parks"), and the Utilities Division ("Utilities"), both parties being Departments of the City of Spokane, a Washington State municipal corporation, whose address is 808 West Spokane Falls Boulevard, Spokane, Washington 99201. Hereafter referenced individually as a "party", and together as the "parties".

1. **PURPOSE:** The City of Spokane Parks and Recreation Department owns and operates Riverfront Park located in the heart of downtown Spokane. Within Riverfront Park, immediately south of the Howard Street South Channel Bridge houses a vital Utilities Division 12-inch Water Transmission Main ("Water Main"). The site is being reconstructed in conjunction with the Looff Carrousel Facility ("Looff") during the 4 year Riverfront Park Rehabilitation Project, funded via a voter approved \$64 Million Parks Bond ("Bond"). Utilities requires the Looff continue carrying the vital Water Main, which will be upgraded to an 18-inch Water Transmission Main, to facilitate greater flows to downtown and northwest Spokane, thus Utilities is financially contributing to the construction costs necessary to ensure its upgrade from a 12 inch to 18 inch Water Main and corresponding installation during the Looff construction process.

The purpose of this MOU is to memorialize this inter-departmental arrangement wherein Utilities agrees to be financially responsible for all costs necessary to upgrade the Water Main through the site as part of the Looff construction contract. Current bid cost estimates for the upgrade of the 18 inch Water Main is expected to be approximately TWO HUNDRED THOUSAND DOLLARS (\$200,000). The parties agree that Utilities is solely financially responsible for any and all costs associated with the Water Main installation. Estimation of construction contingency (10% admin reserve), construction management (15% of construction plus contingency), and design (10% of bid price) costs multiply the construction cost by 1.365. For a bid cost of \$200,000, this brings the reimbursement cost to \$273,000. The reimbursement request should not exceed \$275,000.

Utilities will reimburse Parks directly after costs have been incurred.

# 2. PARKS LOOFF REPLACEMENT PROJECT BACKGROUND:

Site Construction ("Work") will begin early spring of 2017, with demolition and removal of the current Looff facility and Water Main installation slated to commence as early as April, 2017. Work is expected to take twelve (12) months, carrying into spring of 2018. The Water Main will be out of commission for a portion of that period of time.

- a. Looff site is located in Riverfront Park immediately south of the Howard St South Channel Bridge and north of Spokane Falls Blvd.
- b. This Looff Project will remove and replace the existing building site improvements. The new building will be built in nearly the identical footprint as the old building, although will be an updated, streamlined structure. The site improvements will upgrade paving, landscape, and utilities.
- c. The existing Looff site also contains a Utilities 12-inch Water Transmission Main. The new Looff site will include an upgraded 18-inch Water Transmission Main, updated to facilitate greater flows to downtown and northwest Spokane.

# 3. UTILITIES OBLIGATIONS:

Utilities shall be responsible for all design and construction costs associated and necessary for the replacement of the Water Transmission Main.

# 4. PARKS OBLIGATIONS:

Parks shall be responsible for all design and construction associated and necessary for the replacement of the Water Transmission Main. The Parks responsibility includes all related Water Transmission Main Engineering, Design, and Public Works competitive bidding (as identified in RCW 39.04), followed by the associated Construction Work necessary to complete the Water Transmission Main.

### Parks & Utilities MOU RE: Looff Water Main

# 5. PARTIES MUTUAL OBLIGATIONS:

Each party to this MOU are independently responsible for compliance with all federal, state, local laws and ordinances related to the subject matter of this MOU. Each party to this MOU are independent Departments within the City of Spokane, with employees and agents acting solely within the confines of their own related Department, and not under the influence or control of the other party.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

UTILITIES DEPARTMENT

CITY OF SPOKANE PARKS AND RECREATION

Director

Director

CITY OF SPOKANE

CITY ADMINISTRATOR

Attest:

Approved as to form:

Clerk

City Attorney

Attachments that are part of this MOU:

Park Board Resolution for Letter of Intent (LOI) Parks & Utilities Looff MOU SP #XXXXX CSO Ground Lease

16-549



523 East Second Avenue Spokane, Washington 99202 509.363.3125

August 31, 2016

City of Spokane Parks and Recreation Department 808 West Spokane Falls Boulevard, 5<sup>th</sup> Floor Spokane, Washington 99201

Attention: Berry Ellison Riverfront Park Program Manager

Subject: Revised Proposal Park Wide Soil Assessment Services Riverfront Park Spokane, Washington File No. 0110-148-06

#### INTRODUCTION AND PROJECT UNDERSTANDING

In accordance with City of Spokane Request for Qualifications (RFQ) #4262-16 and our proposal dated July 19, 2016, geotechnical evaluations and environmental assessment activities were planned in 2017 at two locations: Havermale Island and the North Bank Parking Area. We understand the City of Spokane Parks and Recreation Department (Parks) would like to conduct a focused soil assessment at Riverfront Park to better understand the extent of soil contamination at the park in order to align necessary funding with remedial activities during park redevelopment. The soil assessment will focus on areas where improvements to the park and subsequent earthmoving activities are anticipated.

To accommodate the request, we propose to transfer the funds allocated for the Havermale Island and North Bank Parking Area geotechnical evaluations and environmental assessments to conduct a focused soil assessment for Riverfront Park. This eliminated about 20 combined geotechnical/environmental soil borings using hollow-stem auger drilling methods, associated geotechnical and environmental testing, development of geotechnical recommendations and reporting from the previously approved scope. The focused soil assessment will include advancing approximately 41 direct-push borings throughout Riverfront Park, submitting one soil sample per boring for chemical analysis and providing a summary report. Direct-push borings will be utilized for efficiency, to minimize surface disturbance and minimize quantities of investigative derived waste (IDW). The following provides a scope of services and estimated budget for the work.

#### SCOPE OF SERVICES

We will conduct the focused environmental soil assessment for the following general improvement areas:

Central Green and Theme Stream;

- Canada Island; and
- North Bank.

Our general scope of services for the focused soil assessment will include:

- Notifying the One-Call utility locating service before starting our subsurface exploration program to identify underground utilities at or near our proposed exploration locations. We also will coordinate with Parks personnel and subcontract a private utility locator to check for possible underground utilities. We assume Parks personnel will mark locations of city-owned underground utilities throughout the park.
- Modifying our current site-specific health and safety plan (HASP) for on-site exploration activities.
- Subcontracting a licensed drilling contractor to advance direct push borings in the improvement areas. Direct-push borings will be advanced to a depth of approximately 15 feet or refusal, whichever is shallower. If refusal is met at a depth of less than 5 feet, one additional attempt near that location will be made. Borings will be backfilled with bentonite upon completion. The proposed number of direct-push borings are as follows:
  - Central Green and Theme Stream: 14 borings;
  - Canada Island: 4 borings;
  - North Bank: 19 borings, and
  - Four borings to be determined with the intent to further define the extent of contamination in construction areas.

Proposed exploration locations for 37 of the 41 borings are provided on Figures 1 through 4.

- Field screening soil samples obtained from the borings for potential petroleum-related and volatile contaminants. Field screening will consist of headspace vapor measurements using a photoionization detector, water sheen testing and visual observation. One sample from each borings indicating the highest level of contamination will be selected for chemical analysis. If field screening doesn't indicate signs of contamination, the soil from approximately 3 to 4 feet below ground surface will be submitted for analytical testing.
- Field screening several soil samples from each boring using x-ray fluorescence (XRF) equipment to better assess the vertical extent of metals contamination. Select samples will be analyzed by a qualified laboratory and the XRF equipment to develop a correlation between XRF results and laboratory chemical analysis.
- Submitting soil samples to a qualified analytical laboratory for environmental testing in accordance with the project soil management plan (SMP). Initial analysis will include:
  - Total petroleum hydrocarbons (TPH) (NWTPH-HCID)
  - Polycyclic aromatic hydrocarbons (PAHs) (EPA SIM 8270)
  - RCRA 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver) (EPA 6010); and
  - Volatile organic compounds (VOCs) if field screening indicates their presence.



- Conducting follow-up analysis depending on initial analytical results, including but not limited to toxicity characteristic leaching procedure (TCLP), polychlorinated biphenyls (PCBs) or other fuel additives in accordance with the SMP.
- Placing IDW into drums pending analytical results. If appropriate, the IDW will be added to the anticipated soil stockpile(s) for the project. IDW disposal costs are not included in the cost estimate.
- Entering chemical analytical results into the Washington State Department of Ecology's (Ecology's) Electronic Information Management (EIM) system.
- Providing a final written focused soil assessment report summarizing field activities, soil conditions and analytical results.

#### SCHEDULE, TERMS AND BUDGET

The Havermale Island and North Bank Landscape combined geotechnical evaluations and environmental assessments have authorized funds totaling \$69,400. The estimated total for the referenced focused soil assessment is \$65,800. The remaining authorized funds might be used in the future to cover supplemental geotechnical investigations or additional soil sampling and analysis. Future use of these funds will be coordinated with Parks. We anticipate conducting field activities in September 2016, weather dependent. The soil assessment report will be available by October 31, 2016.

Our services will be completed in accordance with the contract negotiated in response to RFQ #4262-16 and our proposal dated July 19, 2016. The estimated fee for our services will be determined using the rates contained in our standard Schedule of Charges, which is attached as part of this proposal. We reserve the right to update our Schedule of Charges on an annual basis and fees and services will be adjusted accordingly over the project duration.

This proposal is valid for a period of 60 days commencing from the first date listed above and subject to renegotiation by GeoEngineers, Inc., after the expiration date.

We appreciate the opportunity to submit this revised proposal and look forward to working with you on this project. If you have any questions regarding our proposed scope of services or estimated fee, please call.

Sincerely, GeoEngineers, Inc

Jedidiah R. Sugalski 🥖 Environmental Engineer

JRS:BDW:tjh:mce

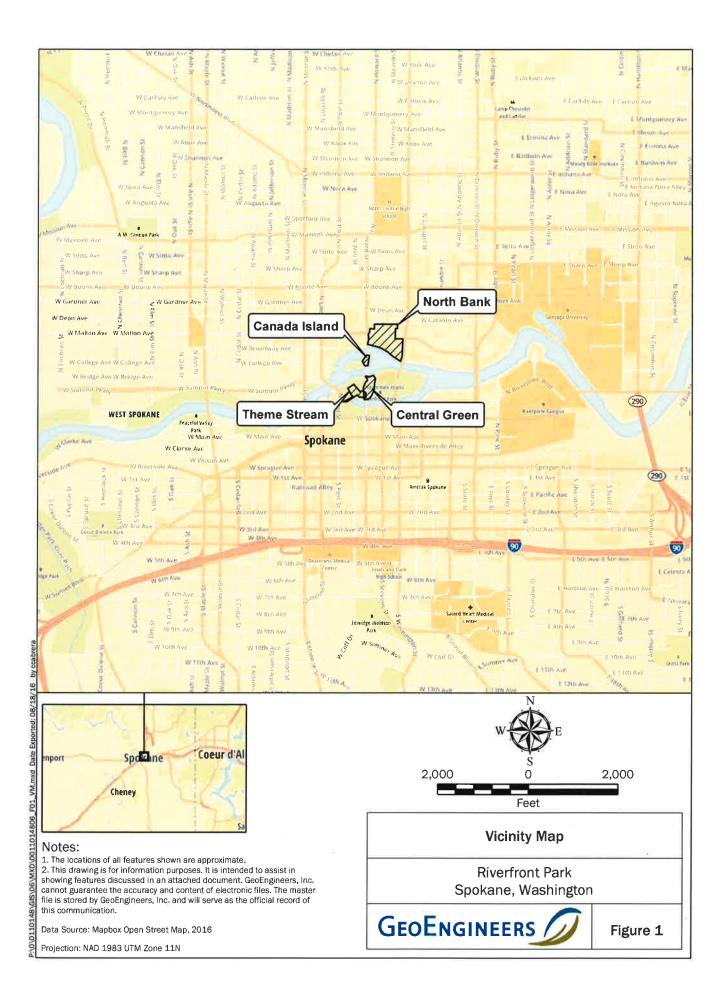
Bruce D. Williams

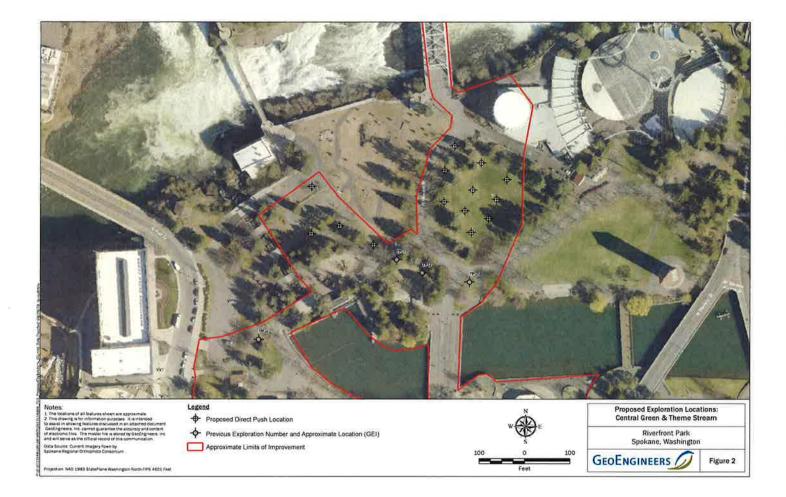
Bruce D. Williams Principal

Attachments: Figure 1. Vicinity Map Figure 2. Proposed Exploration Locations: Central Green and Theme Stream Figure 3. Proposed Exploration Locations: Canada Island Figure 4. Proposed Exploration Locations: North Bank Schedule of Charges – Spokane 2016

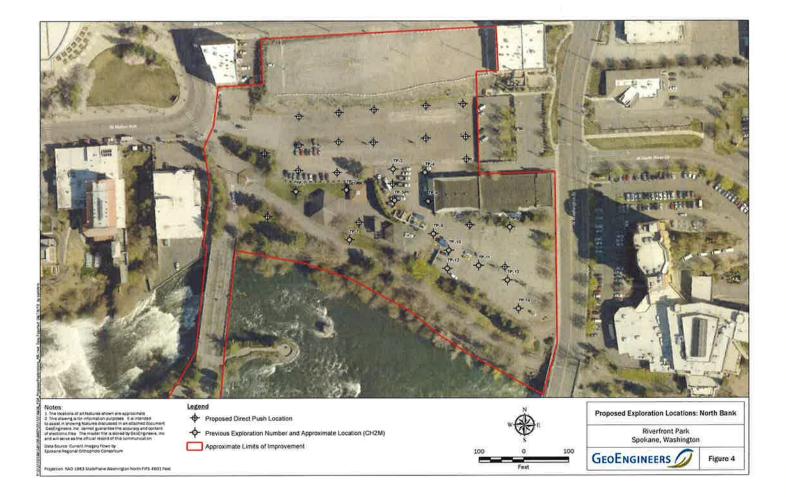


File No. 0110-148-06









# Schedule of Charges – 2016

#### **COMPENSATION**

Our compensation will be determined on the basis of time and expenses in accordance with the following schedule unless a lump sum amount is so indicated in the proposal or services agreement. Current rates are:

Professional Staff	
Staff 1 Engineer/Scientist/Analyst	\$ 95/hour
Staff 2 Engineer/Scientist/Analyst	\$ 105/hour
Staff 3 Engineer/Scientist/Analyst	\$ 115/hour
Engineer/Scientist/Analyst 1	\$ 124/hour
Engineer/Scientist/Analyst 2	\$ 128/hour
Senior Engineer/Scientist/Analyst 1	\$ 144/hour
Senior Engineer/Scientist/Analyst 2	\$ 155/hour
Associate	\$ 175/hour
Principal	\$ 200/hour
Technical Support Staff	
Administrator 1	\$ 65/hour
Administrator 2	\$ 70/hour
Administrator 3	\$ 75/hour
CAD Technician	\$ 80/hour
CAD Designer	\$ 88/hour
CAD Design Coordinator	\$ 97/hour
Technician	\$ 49/hour
Senior Technician	\$ 62/hour
Lead Technician	\$ 70/hour
Environmental Technician	\$ 80/hour

Contracted professional and technical services will be charged at the applicable hourly rates listed above. Staff time spent in depositions, trial preparation and court or hearing testimony will be billed at one and one-half times the above rates. Time spent in either local or inter-city travel, when travel is in the interest of this contract, will be charged in accordance with the foregoing schedule. Rates for data storage and web-based access will be provided on a project-specific basis.



Equipment
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Edulphicit	
Air Quality Equipment, per day	\$ 155.00
Environmental Exploration Equipment, per day	\$ 180.00
Geotechnical Exploration Equipment, per day	\$ 130.00
Groundwater Monitoring Equipment, per day	\$ 248.00
Operations and Maintenance Equipment, per day	\$ 255.00
Special Inspection and Testing Equipment, per day	\$ 18.00
Water Quality Equipment, per day	\$ 155.00
	\$
Specialized Equipment	
Crack Gauges, per gauge	\$ 30.00
Data Logger with Transducers, per day	\$ 105.00
Disposable Bailers, each	\$ 16.00
Field Data Acquisition Equipment, per day	\$ 50.00
Flowmeter, per day	\$ 105.00
GPS Unit, per day	\$ 105.00
Level C PPE, per day	\$ 26.00
Nuclear Density Gauge, per day	\$ 40.00
Padlocks, each	\$ 15.00
pH Meter, per day	\$ 15.00
Scuba Diving Equipment, per day, per diver	\$ 260.00
Soil Samples (in Rings), per sample	\$ 5.00
Soil Samples (in Sleeves), per sample	\$ 8.00
Underwater Camera – Still, per day	\$ 50.00
Underwater Camera – Video, per day	\$ 155.00
Vehicle usage, per mile, or \$60/day, whichever is greater	\$ 0.77
Vehicle - 4-Wheel Drive Truck, per day (1 day min.)	\$ 85.00
Water Filters, each	\$ 32.00
Miscellaneous Field Equipment, at current rates, list available upon request, per day	\$ 20.00

Specialized equipment will be quoted on a per-job basis.

#### **OTHER SERVICES, SUPPLIES AND SPECIAL TAXES**

Charges for services, equipment, supplies and facilities not furnished in accordance with the above schedule, and any unusual items of expense not customarily incurred in our normal operations, are charged at cost plus 15 percent. This includes shipping charges, subsistence, transportation, printing and reproduction, miscellaneous supplies and rentals, surveying services, drilling equipment, construction equipment, watercraft, aircraft, and special insurance which may be required. Taxes required by local jurisdictions for projects in specific geographic areas will be charged to projects at direct cost.

#### **In-House Disposable Field Supplies**

Routinely used field supplies stocked in-house by GeoEngineers, at current rates, list available upon request.

#### Associated Project Costs (APC)

Computer hardware and software, telephone and fax communications, printing and photocopying and routine postage via USPS will be charged at a flat rate of 6 percent of labor charges.



#### Laboratory Schedule of Charges

Laboratory Schedule of Charges		
pe of Test		Unit Price
Moisture Content / Oven (ASTM D2216)	\$	18.00
Sample Preparation	125	
Extrusion - Extrude and log (visual classification) Shelby tube sample, per hour	\$	48.00
Trimming - Trim a soil sample to 2.41-inch dia. for consolidation testing, per hour	\$	48.00
Remolding - Remold a soil sample to desired moisture and density, per hour	\$	48.00
Moisture/Density		25.00
Rings	\$ \$	25.00 40.00
Shelby Tubes, waxed chunk Tubes (liners), chunk	\$ \$	40.00
Organic Content (ASTM D2974)**	\$	62.00
Particle Size Analysis	•	02.00
Sieve (ASTM C136) max size < 3/4-inch (includes -200 Wash, Dry Sieve)	\$	88.00
Sieve (ASTM C136) max size > 3/4-inch (includes -200 Wash, Dry Sieve)	\$	90.00
Percent Passing No. 200 (ASTM C117-87/D1140)	\$	48.00
Combined Sieve and Hydrometer (ASTM D422)	\$	150.00
Hydrometer only (ASTM D422)	\$	98.00
Atterberg Limits (ASTM D4318)	\$	110.00
Nonplastic	- \$	68.00
Specific Gravity, Fine Material (ASTM D854)	\$	68.00
Specific Gravity, Coarse Material (ASTM C-127)	\$	55.0
Percent of Fracture (ASTM D5821)	\$	38.0
Sand Equivalent (AASHTO T 176, ASTM D-2419)	\$	63.0
Compaction (ASTM D1557/D698, Methods A, B and C, AASHTO T-180)		
4 point	\$	150.00
Direct Shear (ASTM D3080)		
Per point	\$	110.00
/ane Shear (ASTM D4648)		
3 points**	\$	57.00
Consolidation (ASTM D2435)		
With 2 timed load increments	\$	360.00
Permeability	*	100.00
Constant or falling head in rigid wall permeameter (ASTM D 2434, D 5856)**	\$	190.00 520.00
In triaxial cell with back pressure saturation (ASTM D 5084)**	φ	520.00
One-Dimensional Swell (ASTM D4546) Method A**	\$	360.0
Method B**	\$	360.0
Method D**	\$	620.0
Triaxial Compression	15	
Unconfined Comp UC (ASTM D2166)	\$	93.0
Unconsolidated Undrained - UU (ASTM D2850)**	\$	180.0
Triaxial Unconsolidated Undrained (back pressure saturation)**	\$	360.0
Consolidated Undrained (ASTM D4767) with pore press. meas CU/S/P**	\$	520.0
Consolidated Drained - CD**	\$	520.0
Consolidated Undrained or Consolidated Drained (3 points)**	\$	1,250.0
CBR with 4 point Proctor (ASTM D1883)	\$	470.0
Rock Point Load Index Test (ASTM D5731)	\$	26.0
Unconfined compressive strength of rock cores (ASTM D7012)	\$	36.0
Concrete Cylinders (ASTM C39) compressive strength (includes C31 molding/curing)	\$	20.0
Mortar Cylinders (ASTM C780)	\$	20.0
Masonry Unit Prisms (ASTM C1314)	\$	105.0
Grout Prisms (ASTM C1019)	\$	26.0
High Strength Grout Cubes (ASTM C109)	\$	20.0
Soil Cement/CLSM Unconfined Compression (ASTM D 4832)	\$	36.00
Concrete Beam Flexural Strength by Third-Point Loading (ASTM C 78)	\$	80.00
Compressive Strength of Drilled Concrete Core (ASTM C 42)	\$	38.00
SFRM Density (ASTM E605)	\$	34.00

Other tests charged at negotiated rates

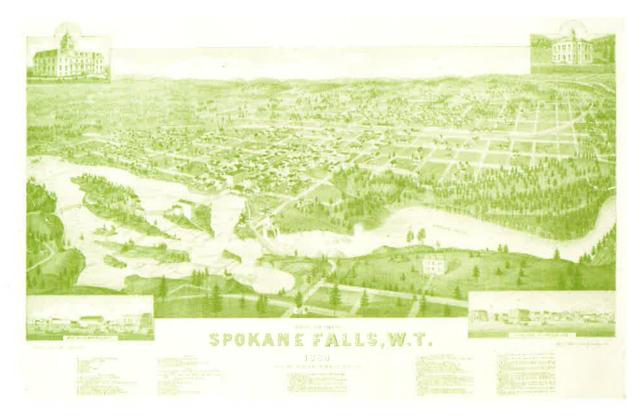
\*Increase unit prices by 20 percent - 50 percent for contaminated samples.

\*\* Conducted in our Redmond Laboratory, additional shipping charges may apply.

All rates are subject to change upon notification.



# Riverfront Park Overall Project Archaeological Statement of Work



Submitted to: Barry Ellison, Program Manager /Landscape Architect City of Spokane Parks and Recreation 808 W. Spokane Falls Blvd. Spokane, WA 99201

Submitted by: Spokane Tribe of Indians Preservation Program 6187 Agency Square Rd. Wellpinit, WA 99040

Fort Walla Walla Museum Heritage Research Services 755 Myra Rd. Walla Walla, WA 99362





# Summary of Proposal Components

The Spokane Tribe of Indians Preservation Program (STIPP) and the Fort Walla Walla Museum Heritage Research Services (HRS) is pleased to submit to the City of Spokane Parks and Recreation this proposal to provide cultural resource services for planned construction of upgrades to Riverfront Park. All cultural resources work must meet the historic preservation requirements of the City, Washington State Environmental Policy Act, and Washington State RCW 27.53. Spokane City Historic Preservation Officer Megan Duvall will lead the consultation process with the Washington State Department of Archaeology and Historic Preservation (DAHP). The parcel on which proposed upgrades are planned lies within a culturally-rich landscape. An assessment of archaeological potential has identified the project area having a high potential for encountering buried archaeological remains that could potentially contribute to our understanding of the rich history of Spokane.

Below, we provide a description of our project team and a statement of work with assumptions our level of effort is based and identify specific project tasks and deliverables.

# **Project Team**

STIPP and Fort Walla Walla Museum HRS have collaborated to assemble a team that can ensure the proposed project complies with all historic preservation regulations and requirements. Together, STIPP and Fort Walla Walla Museum HRS value working with local governments to balance historic preservation with the needs of a dynamic community such as Spokane. Committed to historic preservation in eastern Washington we have staff serving on archaeological society boards in addition to being active members of professional societies. As part of both our program's missions, STIPP and Fort Walla Walla Museum HRS are dedicated to fostering historic preservation and public engagement of cultural resources. STIPP Principal Investigator James Harrison and Fort Walla Walla Museum HRS Principal Investigator Ashley Morton are experienced with the archaeology of Spokane and other downtown urban environments and have the project management skills needed to successfully carry out all cultural resources services described in this statement of work.

## STIPP PI: James Burr Harrison, III, M.A.

Mr. Harrison has nearly 15 years of experience in CRM, having served as project director and principal investigator (PI) for numerous survey, testing, data recovery and monitoring projects in Texas, Arizona, Tennessee, Montana, Idaho, and Washington. Meeting the Secretary of Interior's qualification standards for archaeology, Mr. Harrison received a degree in psychology (B.A.) from Texas State University and anthropology (M.A.) from Texas A&M University. Over the past five years, he has directed projects in and around the city of Spokane that included supervision and oversight of fieldwork, budget management, and preparation of reports. He has participated in or directed projects at several archaeological sites in and around the area. Of particular relevance here is Mr. Harrison's successful management of the monitoring of a historical-period area near Monroe Street and College Avenue in addition to management of a survey identifying pre-contact village remains west of the project area. Mr. Harrison has managed contracts with various federal, state, and local agencies and has extensive experience successfully meeting local, state, and federal

government agency standards. For the project, Mr. Harrison would direct research and analyses, coauthor project reports, co-direct field efforts, and assist with project design and execution.

Fort Walla Walla Museum HRS PI and Historical Archaeologist: Ashley M. Morton, M.A., RPA Ms. Morton is listed in the Register of Professional Archaeologists (RPA), meets the Secretary of Interior's Qualifications Standards in archaeology, and has over 10 years of experience in CRM, having served as project manager and principal investigator (PI) for numerous monitoring, survey, and testing projects in and around the Pacific Northwest, Southwest, and California. Ms. Morton received degrees in anthropology from the University of Arizona (B.A.) and the University of Idaho (M.A.). Her work experience includes participation in fieldwork as well as supervision and oversight, laboratory and archive experience, budget management, preparation of preliminary and final reports, SEPA review, and Section 106 evaluations and mitigation documents. She has overseen and participated in numerous cultural resource surveys in the Walla Walla Valley and Seattle, including urban construction projects at the Jonathan M. Wainwright Memorial VA Medical Center in Walla Walla and the City of College Place Kiwanis Park. She also has extensive experience successfully meeting local, state, and federal government agency standards and report review. Ms. Morton is also an active member of the archaeological and historic preservation community in Walla Walla and throughout the state. She is a board member of the Walla Walla Chapter of the Archaeological Institute of America (a regional chapter to the national organization) and serves as the Washington State Project Archaeology Coordinator, a nation-wide program providing K-12 archaeological curriculum and training to local schools and teachers. For the planned project, Ms. Morton would coauthor reports, lead historical-period research and analyses, co-direct field efforts, and assist project design and implementation.

Fort Walla Walla Museum GIS Analyst: Jonathan M. Haller, M.Sc.-GIST, GISP Mr. Haller is a certified GIS Professional with over 15 years of experience in GIS; being involved in varying stages of numerous cultural resource, environmental planning, and right-of-way projects. Mr. Haller received his B.A. in Anthropology and M.Sc. in Geospatial Information Systems Technology, respectively, at the University of Arizona. His work experience includes mapping and field data collection and has extensive knowledge with handheld GPS units, ESRI ARCGIS software, and database management. For the proposed work, Mr. Haller would complete mapping and geospatial efforts for testing effort and ensure maps presented in draft and final reports for testing results meet with state reporting standards. Mr. Haller is principal and owner of Stateline GIS and serves as an on-call sub consultant to HRS.

# Statement of Work

This project is situated within an area part of the initial town site of modern-day Spokane. Before Euroamerican settlement, this area was utilized by Native American groups for centuries and still continues to be a culturally important location to the Spokane Tribe of Indians. Our statement of work is guided by our knowledge of the archaeological record of the downtown Spokane and general developmental history of Riverfront Park through a detailed assessment report written by Ms. Morton and contributed to by Mr. Harrison in advance of planned construction for the recreational rink and skyride facility and to aid archaeological testing for that effort under an archaeological excavation permit (2016-29). The effort detailed here is to incorporate cultural resource services for other planed upgrades to areas of Riverfront Park including:

- Howard Street Bridge
- The Loof Carrousel
- IMAX Theater and US Pavillion
- Canada Island
- And, the North Bank

We propose an approach based on archaeological sensitivity (i.e. high, medium, or low) to these locations according to research conducted in the archaeological potential assessment (Morton and Harrison 2016) in conjunction with known project construction and ground disturbance (major vs. minimal). Briefly, we propose locations with high archaeological sensitivity and major ground disturbance to undergo Phase I and Phase II survey testing and those locations with low archaeological sensitivity and minimal ground disturbance operate under an inadvertent discovery plan (IDP). Those with moderate archaeological sensitivity and low to medium ground disturbing activities would be monitored. Pending the outcome of Phase I testing and/or Phase II investigation (additional effort needed to determine if resources encountered meet criteria for listing on the Washington State Register and/or National Register of Historic Places), archaeological monitoring, or inadvertent discoveries encountered, it may be necessary to conduct Phase III data recovery to minimize or reduce impacts to significant cultural resources. Below, lists the locations above with a proposed strategy:

- Howard Street Bridge: Monitoring
- The Loof Carrousel: Phase I and Phase II Testing
- IMAX Theater and US Pavillion: Monitoring or Phase I Testing/Phase II investigation (pending additional project design details)
- Canada Island: Monitoring
- North Bank: Inadvertent Discovery Plan

#### Assumptions

A list of assumptions is provided below on the proposed level of effort for completing the needs of each location's planned upgrade project.

- Proposed strategies for project locations is based on construction plans and are subject to change with the changing of design efforts.
- The project proponent will be responsible for installing secure fencing around the project site.
- Phase I archaeological testing, Phase II investigation, monitoring, and inadvertent discoveries will not encounter human remains.
- Phase I archaeological testing, Phase II investigation, monitoring, and inadvertent discoveries will not encounter buried hazardous materials.

- Phase I testing and possible Phase II investigation for (a) parts of the Loof Carrousel project area not under the existing building and (b) under the existing carrousel building will be conducted separately and require two separate field mobilizations.
- The objective of Phase I testing is to identify the presence or absence of archaeological resources whereas the goal of Phase II investigation seeks to determine if those archaeological resources identified in Phase I meet criteria for listing on the Washington State Register and/or National Register of Historic Places. In some instances information can be obtained during the Phase I effort to not require Phase II. Similarly, Phase II may require a separate mobilization.
- Time estimated for monitoring assumes ¼ of the time for those project areas not tested (Phase I) and assumes monitoring 1/20th of the time for project areas that have been tested; according to the current construction schedule as provided, and the ability to better target monitoring areas based on the results of testing.
- Monitoring estimates are based on the assumption that monitoring of all ground disturbance can be reduced to monitoring of medium-risk activities/areas based on comparison of current construction plans and known historic resources as documented in the extant Park-wide Assessment Report (Morton and Harrison 2016).
- Monitoring amounts are based on the assumption that low-risk activities/areas can be covered under and Inadvertent Discovery Plan based on the same Park-wide assessment Report.
- Monitoring reports will be reported separately from Phase I testing and possible Phase II investigations. An end of year (EOY) annual report will be provided to the City of Spokane Parks and Recreation for submission to Washington State DAHP and affected Tribes for three consecutive years (2016-2018).
- Main reporting for inadvertent discoveries is to be included in the proposed annual monitoring report, but will also likely include draft correspondence with the DAHP and effected tribes.
- Phase I testing will use mechanically excavated trenches and/or test units. Trenches and test units will be placed in areas where Sanborn maps indicate the potential for subsurface features.
- Phase II investigation will include a combination of mechanical stripping, test units, and/or hand excavated 1x1 meter units.
- The project proponent will supply a backhoe and operator for Phase I and Phase II mechanical digging.
- Testing estimates are based on two project locations, the Looff Carousel and potentially the US Pavilion on Havermale Island. The necessity of testing for the US Pavilion depends on the nature of construction, which has yet to be determined. Therefore this estimated budget could potentially be reduced in half, or these funds could be reallocated to another site if there are major design changes affecting a high-risk area.
- The estimated budget for testing does not include potential curation costs for recovered artifacts, at an estimated volume of 1 square foot per project.

- Phase I and possible Phase II reporting will be submitted to the City of Spokane for submission to Washington State DAHP and affected tribes at least 30 days before known planned construction will commence.
- End of Field (EOF) reports will be provided for project locations with Phase I testing and Phase II investigation, and monitoring. EOF reports will be submitted to the City of Spokane Parks and Recreation seven business days following completion of these efforts.
- Phase III data recovery is a potential mitigation activity. It cannot be known at the submission of this proposal if data recovery will be needed. The need for data recovery or not and the extent of that work is impossible to accurately predict at this point, and is contingent on the results of testing and monitoring.
- The estimated budget for data recovery does not include potential curation costs for recovered artifacts, at an estimated volume of 8 square feet per project.
- Should prehistoric or historical-period artifacts be found, only those temporally diagnostic will be collected for laboratory analysis and curation. Non-diagnostic artifacts will be analyzed in the field and returned to the bottom of the test unit it originated out of.
- Additional design changes may result in changes to this scope of work.
- The level of effort will ultimately have to be stipulated to the DAHP approved Park-wide permit.
- Estimated reporting times including lab work and data entry but that additional time may be needed based on the types of artifacts and volume encountered.
- Reporting will include completion of DAHP site forms (if needed).

#### **Project Tasks**

Achieving cultural resource compliance for known planned upgrades to Riverfront Park will require a multi-phase plan. The following tasks were identified:

- 1. Permit and Inadvertent Discovery Plan (IDP)
- 2. Research
- 3. Archaeological Monitoring
- 4. Inadvertent Discoveries
- 5. Phase I Testing
- 6. Phase III Data Recovery
- 7. Project Management and Meeting Attendance

Task	Description	STIPP Hours	FWWM HRS Hours
1	Preparation of DAHP	PI: 30	PI: 20
	Riverfront Park-Wide	Tribal Arch: 10	
	Permit and IDP		
2	Archival and historical	Tribal Arch: 40	PI: 20
	research		Arch: 20
3	Archaeological	See below	See below
	construction monitoring		
3a	Field work	Tribal Arch: 160	PI: 0
		Crew: 960	Arch: 0
3b	Reporting	PI: 21	PI: 0

Task	Description	STIPP Hours	FWWM HRS Hours
		Tribal Arch: 120 GIS Analyst: 10	Archaeologist: 0
4	In-field documentation of potentially significant archaeological resources under Monitoring and Inadvertent Discovery Plan covered activities	See below	See below
4a	Fieldwork	PI: 8* Tribal Arch: 8* Crew: 8*	PI: 8*
4b	Reporting	PI: 8* Tribal Arch: 8*	PI: 8*
5	Testing	See below	See below
5a	Fieldwork	PI: 160 Tribal Arch: 100 Crew: 240	PI: 160 GIS Analyst: 8
5b	Reporting	PI: 30 Tribal Arch: 30	PI:140 Arch: 120 GIS Analyst: 23
6	Data Recovery		
ба	Fieldwork	PI: 120 Tribal Arch: 100 Crew: 240	PI: 120 GIS Analyst: 16
6b	Reporting	PI: 40 Tribal Arch: 40	PI: 220 Arch: 80 GIS Analyst: 23
7	Project Management and Meeting Attendance	Program Mgr: 20 Office Admin: 8 PI: 79 Tribal Arch: 79	PI: 79

Project Deliverables

Deliverable Description	
Deliverable #1	Park-Wide Archaeological Excavation Permit
Deliverable #2	Inadvertent Discovery Plan
Deliverable #3-7	End of Field memos (up to 4)
Deliverable #8-10	Annual Monitoring Report (up to 3)
Deliverable #11 and 12	Draft and Final Technical Reports for Phase
	I/Phase II (up to 2)
Deliverable #13	Draft and Technical Report for Phase III (1)

**Potential Project Problems** 

Archaeology in urban settings can present many challenges and unexpected results. Unanticipated discoveries represent perhaps the greatest potential challenge in achieving SEPA cultural resource compliance for planned upgrades to Riverfront Park. Disturbance from repeated construction and use may reveal no archaeological remains in the Area of Potential Effect (APE). It is also possible that a greater frequency of archaeological features and deposits may be encountered than is

anticipated. Although our estimates for the frequency of archaeological features and kind of archaeological remains are based on previous experience and reliable sources of site-specific information, unexpected features requiring a greater level of effort to excavate could be revealed during ground disturbing activities.

We believe the key to dealing with potential unanticipated problems in this sort of CRM work is communication. STIPP and Fort Walla Walla HRS will ensure clear and open lines of communication with the City of Spokane Parks and Recreation. We will keep the City of Spokane Parks and Recreation updated over the course of project efforts and upon completing milestones, sharing our thoughts on work flow, budget, and any issues we might identify that may affect costs, schedule, or historic-preservation concerns. If any unforeseen circumstances or issues arise, we will immediately contact the City of Spokane Parks and Recreation to discuss how best to proceed while balancing the historic preservation needs of the city with the social and economic benefit of the project, ultimately, to achieve cultural resource compliance for the renovation of Riverfront Park.

# **Cost Estimate**

The total budget to provide cultural resource services for the overall project archaeological statement of work for Riverfront Park is \$193,028.74. This cost covers the estimated level of effort needed to cover testing, archaeological monitoring, permitting, inadvertent discoveries and an inadvertent discovery plan, data recovery, four End-of-Fieldwork memos, three annual monitoring reports, two draft technical testing reports, two final testing reports, and one draft and final data recovery report, all for the City Of Spokane Parks and Recreation and DAHP review and comment.

All costs are based on assumptions outlined above and assumes for project management, one three hour meeting every other month for three consecutive years and one 0.5 hour per week (for STIPP specifically, split between their PI and Tribal Archaeologist) for three consecutive years (2016-2018). The estimated costs anticipate a total of 3814 hours of professional services according to rates in Table A1 for STIPP and Table A2 for FWWM HRS in order to cover tasks outlined in the statement of work. For STIPP, direct costs include mileage is estimated to be 171 trips over a three year period for all tasks at 79 miles per trip (via shortest route Devils Gap Rd) and at 51 cents per mile. Direct costs for Fort Walla Walla Museum HRS include mileage, lodging, and per diem during fieldwork efforts. It is assumed that the Fort Walla Walla Museum HRS PI will not physically attend project management meetings. Mileage, lodging and per diem will be billed on the federal rate for the year in which fieldwork is performed. The current cost supplied is based on 2016 figures for purposes of an estimate. Fort Walla Walla Museum estimates eight round trips, from Walla Walla Walla to Spokane and back, totaling 2864 miles at .54 cents per mile.

This is a time-and-materials budget with an estimated cost. Additional work over the existing budget (for the STIPP ~\$25K remaining and for Fort Walla Walla Museum HRS ~\$5K) will be covered under a supplemental budget provided by the city.

There are still many unknown factors regarding the required archaeological scope of work. Some tasks or subtasks may not be needed (i.e. data recovery), others may have to be expanded, depending on the ultimate nature of the construction and the archaeological resources.

Production of reports is assumed to be PDF copies delivered via email, cloud server or FTP source, and/or CD. Hard copies may be produced upon request at additional cost. The cost estimate covers all direct and indirect costs related to materials needed to perform archaeological survey and completion of report production.

Spokane Tribe Archaeology and Preservation Program				
Cultural Resource Services Budget				
Prepared By: Jackie Corley				
Riverfront Park Overall Archaeological Project				
City of Spokane				
	BEDSONNEL	DILLING DATE	HOURS	TOTAL
The Lat Describe and the description of Discourses	PERSONNEL	BILLING RATE	10	\$320,0
Task I-Permit and Inadvertent Discovery Preparation of DAHP Riverfront Park	Tribal Archaeologist Principal Investigator	46	30	\$1,380.0
Park-wide Permit		100		
			Task 1 Subtotal:	\$1,700.0
Task 2- Research	Tribal Archaeologist	32	-40	\$1,280,0
Library and historic research related to the project				
			Task 2 Subtotal:	\$1,280,0
	The first state of the state of	32	160	\$5,120.0
Task 3- Monitoring Archaeological construction monitoring	Tribal Archaeologist: Fieldwork Tribal Archaeologist: Reporting	32	120	\$3,840.0
and annual reporting	Principal Investigator: Reporting	46	21	\$966.0
	Crew	25	960	\$24,000.0
	GIS: Reporting	25	10	\$250.0
			Task 3 Subtotal:	\$34,176.0
				2942.00
Task 4- Inadvertent Discoveries	Tribal Archaeologist: Fieldwork	32	8	\$256.0 \$256.0
In field documentation of potentially significant	Tribal Archaeologist: Reporting	32	8	\$368.0
archaeological resources under Monitoring and Inadvertent Discovery Plan covered activities, The number of inadvertent	Principal Investigator : Fieldwork Principal Investigator : Reporting	46	8	\$368.0
discoveries (ifany) is impossible to predict. The listed	Crew	25	8	\$200.0
estimated budget is per occurrence.				
1			Task 4 Subtotal:	51,448.00
Task 5- Testing	Tribal Archaeologist: Fieldwork	32	100	\$3,200.00
Archaeological testing (trench array) of two sites,	Tribal Archaeologist: Reporting	32	30	\$960.00
the Looff Carousel and potentially the Pavilion on Havermale	Principal Investigator: Fieldwork	46	160	\$7,360.00
Island. Testing is to be conducted in areas where there is high-risk		46	30	\$1,380,00
of construction activities intersecting significant archaeological resources as documented in the extant Park- wide	Crew	25	240	30,000.00
Assessment Report (Morton and Harrison 2016)			Task 5 Subtotal:	\$18,900.00
Task 6: Data Recovery	Tribal Archaeologist: Fieldwork	32	100	\$3,200.00
Data recovery is a potential mitigation activity,	Tribal Archaeologist: Reporting	32	40	\$1,280.00
the archaeological excavation of significant features	Principal Investigator: Fieldwork	46	120	\$5,520.00
and/or deposits as determined by the results of	Principal Investigator: Reporting	46	40	\$1,840,00
testing and monitoring fieldwork and extant	Crew	25	240	\$6,000.00
Park-wide Assessment Report			Task 6 Subtotal	\$17,840.00
(Morton and Harrison 2016)			task 8 Subcotal	211/040101
Task 7: Project Management & Meeting Attendance	Program Manager	44	20	\$880.00
Meetings in Spokane, billing hours, conference calls	Administrative Assistant	34	8	\$272.00
1214/128	Principal Investigator	46	79	\$3,634.0
	Tribal Archaeologist	32	79	\$2,528,00
			Task 7 Subtotal	\$7,314.00
Direct Expenses		0.585	12 500 7 4 1447	\$7,902.7
Mileage** Rate		0.585	13,509 Total Miles:	\$7,902,7
171 trips over a three year period for all tasks X 79 miles (via shortest Devils Cap Rd)				
and the port of the state			Total Project Budget:	\$90,560.7
Estimated Budget			,	
Overhead (11.13% of Total Indirect and Direct Costs)				\$10,079.4
Contraction and the address of the Contract Mathematical System (Contract Mathematical System) (Mathematical System) (Mathematica (Mathematical System) (Mathematical System				And and and

Table A 1

			TOTAL
			TOTAL
Principal Investigator	90	20	\$1,800.0
		Task 1 Subtotal	\$1,800.0
		THELE JUSTICE	- Services
Principal Investigator	90	20	\$1,800.0
	50	20:	\$1,000.0
		Task 2 Subtotal	\$2,800.0
	I IIII		
Principal Investigator	90	0	\$0.0
			_
		Task 3 Subtotel	r \$0.0
Data start formed as to	00	16	\$1,440.0
r macipal investigator	50	10	31,440,0
		Tank 4 Subtotal	51,440.0
Principal Investigator Fieldwork	90'	160:	\$14,400.0
Principal Investigator: Reporting	90'	140.	\$12,600.0
GIS Analyst: Heldwork	80	8	\$640.0
sk GIS Analyst: Reporting	80	23	\$1,840.0
Archaeologist	50	120	\$6,000.0
		Task 5 Subtotal	535,480.0
- present and the state of the	a de la constante de la consta		\$10,800.0
			\$19,800.0
			\$1,280.0
		4-54	\$1,840.0
Archaeologist	50	80	\$4,000.0
		WOOD PROCESSION	\$37,720.0
		1858 0 5001016	531,720.0
Reincipal Investigator	90	79	\$7,110.0
rincipal investigator			
		Task 7 Subtotal	\$7,110.0
2016 only			
	0.54	2,864 Total Miles:	\$1,546.5
	96	32 Total nights	\$3,072.0
	64	30: Total days	\$1,920.0
1			\$500.0
		Total Project Budget:	\$92,388.5
	Principal Investigator Principal Investigator Fieldwork Principal Investigator: Reporting GIS Analysi: Fieldwork sk. GIS Analysi: Reporting	Principal Investigator     90       Principal Investigator     90       Archaeologist     50       Principal Investigator     90       Principal Investigator: Reporting     90       CIS Analyst: Reporting     80       Archaeologist     50       Principal Investigator: Fieldwork     90       Principal Investigator: Fieldwork     90       Principal Investigator: Fieldwork     90       Principal Investigator: Fieldwork     90       Principal Investigator: Steporting     90       Principal Investigator     90       Principal Investigator     90       Principal Investigator     90	Principal Investigator       90       20         Task 1 Subtotal         Principal Investigator       90       20         Archneologist       50       20         Principal Investigator       90       0         Principal Investigator       90       0         Principal Investigator       90       0         Principal Investigator       90       0         Principal Investigator       90       16         Principal Investigator:       80       8         Sk GIS Analyst: Recording       80       23         Archneologist       120       Task 5 Subtotal         Principal Investigator:       80       23         Archneologist       50       80         Principal Investigator:       90       79         Principal Investigator:       90       79         Task 5 Subtotal         Principal Investigator:       90       79         Task 5 Subtotal

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Table A 2

City Clerks No.\_\_\_\_





## CITY OF SPOKANE INTERDEPARTMENTAL REIMBURSEMENT MEMORANDUM OF UNDERSTANDING

## RE: New Riverfront Park Looff Facility Construction and the Utilities Water Main

THIS MEMORANDUM OF UNDERSTANDING ("MOU") is between the City of Spokane Parks and Recreation Department ("Parks"), and the Utilities Division ("Utilities"), both parties being Departments of the City of Spokane, a Washington State municipal corporation, whose address is 808 West Spokane Falls Boulevard, Spokane, Washington 99201. Hereafter referenced individually as a "party", and together as the "parties".

1. **PURPOSE**: The City of Spokane Parks and Recreation Department owns and operates Riverfront Park located in the heart of downtown Spokane. Within Riverfront Park, immediately south of the Howard Street South Channel Bridge houses a vital Utilities Division 12-inch Water Transmission Main ("Water Main"). The site is being reconstructed in conjunction with the Looff Carrousel Facility ("Looff") during the 4 year Riverfront Park Rehabilitation Project, funded via a voter approved \$64 Million Parks Bond ("Bond"). Utilities requires the Looff continue carrying the vital Water Main, which will be upgraded to an 18-inch Water Transmission Main, to facilitate greater flows to downtown and northwest Spokane, thus Utilities is financially contributing to the construction costs necessary to ensure its upgrade from a 12 inch to 18 inch Water Main and corresponding installation during the Looff construction process.

The purpose of this MOU is to memorialize this inter-departmental arrangement wherein Utilities agrees to be financially responsible for all costs necessary to upgrade the Water Main through the site as part of the Looff construction contract. Current bid cost estimates for the upgrade of the 18 inch Water Main is expected to be approximately TWO HUNDRED THOUSAND DOLLARS (\$200,000). The parties agree that Utilities is solely financially responsible for any and all costs associated with the Water Main installation. Estimation of construction contingency (10% admin reserve), construction management (15% of construction plus contingency), and design (10% of bid price) costs multiply the construction cost by 1.365. For a bid cost of \$200,000, this brings the reimbursement cost to \$273,000. The reimbursement request should not exceed \$275,000.

Utilities will reimburse Parks directly after costs have been incurred.

# 2. PARKS LOOFF REPLACEMENT PROJECT BACKGROUND:

Site Construction ("Work") will begin early spring of 2017, with demolition and removal of the current Looff facility and Water Main installation slated to commence as early as April, 2017. Work is expected to take twelve (12) months, carrying into spring of 2018. The Water Main will be out of commission for a portion of that period of time.

- a. Looff site is located in Riverfront Park immediately south of the Howard St South Channel Bridge and north of Spokane Falls Blvd.
- b. This Looff Project will remove and replace the existing building site improvements. The new building will be built in nearly the identical footprint as the old building, although will be an updated, streamlined structure. The site improvements will upgrade paving, landscape, and utilities.
- c. The existing Looff site also contains a Utilities 12-inch Water Transmission Main. The new Looff site will include an upgraded 18-inch Water Transmission Main, updated to facilitate greater flows to downtown and northwest Spokane.

# 3. UTILITIES OBLIGATIONS:

Utilities shall be responsible for all design and construction costs associated and necessary for the replacement of the Water Transmission Main.

# 4. PARKS OBLIGATIONS:

Parks shall be responsible for all design and construction associated and necessary for the replacement of the Water Transmission Main. The Parks responsibility includes all related Water Transmission Main Engineering, Design, and Public Works competitive bidding (as identified in RCW 39.04), followed by the associated Construction Work necessary to complete the Water Transmission Main.

## Parks & Utilities MOU RE: Looff Water Main

# 5. PARTIES MUTUAL OBLIGATIONS:

Each party to this MOU are independently responsible for compliance with all federal, state, local laws and ordinances related to the subject matter of this MOU. Each party to this MOU are independent Departments within the City of Spokane, with employees and agents acting solely within the confines of their own related Department, and not under the influence or control of the other party.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

UTILITIES DEPARTMENT

CITY OF SPOKANE PARKS AND RECREATION

Director

Director

CITY OF SPOKANE

CITY ADMINISTRATOR

Attest:

Approved as to form:

Clerk

City Attorney

Attachments that are part of this MOU:

Park Board Resolution for Letter of Intent (LOI) Parks & Utilities Looff MOU SP #XXXXX CSO Ground Lease

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