

**Mackay Sposito**  
**Exhibit A1- Scope of Work - Contract Change Order 7**

**CITY OF VANCOUVER, WASHINGTON**  
**SE 1<sup>st</sup> STREET IMPROVEMENTS – 162<sup>nd</sup> AVENUE to 177<sup>th</sup> AVENUE**  
**September 24, 2019**

**INTRODUCTION**

Mackay Sposito entered into a prime contract with the City of Vancouver in November 2013 to perform design engineering and other related professional services for the SE 1st Street Improvements: 164th Avenue to 192<sup>nd</sup> Avenue (COV Project No. 071612). The project is federally funded and intended to address safety and congestion issues in the project area.

The project team submitted 50% design for the project corridor (164<sup>th</sup> Avenue to 192<sup>nd</sup> Avenue) in November 2014. Following the 50% submittal and due to funding limitations, the City decided to phase the corridor improvements into two phases with Phase 1 to cover 164<sup>th</sup> Avenue to 177<sup>th</sup> Avenue, and Phase 2 to cover 177<sup>th</sup> Avenue to 192<sup>nd</sup> Avenue. Per City direction, design development for Phase 1 would be advanced under the current professional services contract, with Phase 2 improvements to be advanced in the future as funding becomes available. In March 2019 the City provided approval to proceed with taking the Phase 1 project to a 90% design and the 90% submittal was provided to the City in August 2019.

This scope of work covers advancing the Phase 1 improvements from 90% to Final Design, as well as providing bidding phase and construction engineering support. Professional services include project management, civil engineering, traffic engineering, landscape design, structural design, public involvement, and utility coordination.

**Summary of Previous Contract Amendments:**

- *Supplement 1 (November 2013)* – LAG Supplement Agreement which replaced provisional rates with the WSDOT audited rates. No change in total contract amount.
- *Change Order 1 (February 2014)* – Mackay performed out-of-scope work to update project CAD Base Map with new topographic survey information as provided by City survey crews; coordinated with City to ensure all needed information provided by supplemental survey efforts. Contract increased by \$6,039.
- *Change Order 2 (July 2014)* – AINW performed additional out-of-scope work related to the English Farm historic property for Section 106 compliance. Contract increased \$3,106.60.
- *Change Order 3 (Not executed)* – Placeholder for structural supplemental contract to include design of noise walls. Change Order not finalized, or approved by City, and it was covered under Change Order 6.
- *Change Order 4 (April 2015)* – Landau Associates completed out-of-scope work efforts required for NEPA environmental documentation, including additional noise wall

analysis and noise barrier modeling. No Change in total contract cost; budget for MacKay Sposito design engineering task was reduced to cover the additional project cost.

- *Change Order 5 (May/August 2015)* – Reallocated funds from GeoDesign (geotechnical services), Kittleson (traffic analysis and engineering), and project contingency to MacKay Sposito for out-of-scope design engineering and project management efforts. No change in total contract cost.
- *Change Order 6 (March 2019)* – Contract expiration date was extended to 12/31/2019. Additional budget of \$300,000.00 was allocated through MacKay Sposito's transportation engineering on-call agreement to take the project to a 90% design level.

### **Project Schedule**

The following project schedule was assumed with the original contract, with revised schedule dates as of September 2019 shown in *italics* below:

- 30% Plans - April 2014; (*In Original Contract; Changed to Review Meeting held August 2014*)
- 50% P&E – N/A (50% submittal added by City in July 2014; Submittal made August 2014)
- 60% P&E – July 2014 (*In Original Contract; City Replaced 60% submittal with 50% submittal in July 2014, but then added 60% submittal back into Contract due to significant design revision; submittal made March 2016*)
- 75% PS&E – N/A (75% Submittal added by City in July 2014; Submittal made in October 2017)
- 90% PS&E – June 2015 (Submittal made in August 2019)
- 100% PS&E – December 2015 (*Anticipated future submittal date January 2020*)

### **General Scope of Work:**

Below is an outline of project tasks included with this contract supplement.

#### **Task 1 – Project Management and Administration**

#### **Task 2 – Civil Final Design**

#### **Task 3 – Traffic Engineering Design (Contracted Separately)**

#### **Task 4 – Structural Final Design (WRK Engineers)**

#### **Task 5 – Public Involvement**

#### **Task 6 – Bidding and Construction Phase Support**

### **Specific Scope of Work**

#### **Task 1: Project Management and Administration**

Provide direction to project team and management of project scope, schedule, and budget.

#### **1.1 Project Management**

##### **1.1.2 Final Design Project Management**

- Provide management and direction to the Project team in order to complete the project on time and within budget.
- Prepare monthly invoices and status reports for the City.
- Revise the schedule, as necessary to reflect changes in the Project milestones and timelines.

## **1.2 Project Coordination**

Coordinate with the City, project delivery team, and key stakeholders to advance project.

### **1.2.2 Final Design Project Coordination**

- Schedule and attend team meetings and prepare meeting agendas and notes. This includes progress, review and coordination meetings.
- Schedule and attend project meeting with key project team members and representatives from the City of Vancouver, and other Agencies, as needed.

## **1.4 Quality Assurance / Quality Control**

### **1.4.2 Final Design Quality Assurance / Quality Control**

Provide overall project quality assurance, adding value to the project delivery (quality and project management) process. This includes:

- Providing general project oversight and guidance.
- Ensuring that technical and peer reviews are undertaken to the appropriate level.

### ***Task 1 Assumptions:***

- Project Management and coordination efforts through January 2020.
- Three-month duration Final Design Delivery efforts, and City coordination allotment assumed between submittals.
- A supplement may be requested if project coordination needs and or/anticipated project schedule exceeds that assumed with this supplement.
- City will lead coordination efforts with affected property owners.
- Utility coordination is included under Task 2.

### ***Task 1 Deliverables:***

- Progress Meeting Minutes
- Monthly Progress Reports
- Updated Project Schedule (as needed)

## **Task 2: MacKay Sposito Final Design**

### ***2.2 Final Design***

#### **2.2.1 Utility Coordination.**

*2.2.1(a) Utility Conflict Report.* Finalize Utility Conflict Report based on the previous outreach completed during the 90% design phase. Updated utility conflict letters and 90% design plans shall be sent to the affected utility companies describing the conflicts that exist and the required adjustments to eliminate the conflict.

*2.2.1(b) Utility Coordination.* Coordinate with private and public utilities including power, phone, cable, gas, and other utilities. This task includes coordination with CPU for relocation required as part of the right-of-way acquisition of their property along SE 1<sup>st</sup> Street.

#### 2.2.2 90% Design Review Revisions

This task covers review of the 90 % City of Vancouver design comments, and re-design as needed by MacKay Sposito and Kittelson to advance the project to a 90% state.

- Design Review and QA/QC
- General Design Coordination
- Review and Incorporate 90% Review Comments by City

#### 2.2.2.a 90% ADA Ramp Design

*This task covers the additional data and details that needs to be added for ADA ramps and grading design based on the updated WSDOT requirements.*

#### 2.2.3 Final Hydrology Report

MacKay Sposito will finalize the 90% Technical Information Report based on City comments and design revisions.

#### 2.2.4 Final Plans.

Produce a final plan set laid out as follows:

- Title Sheet, General Notes and Sheet Index
- Traffic Staging Plan
- Roadway Section and Details
- Existing Conditions Sheets
- Demolition Sheets
- Street Plan and Profile Sheets
- Curve Data and Intersection Plan Sheets
- Drainage Plan and Profile and data Sheets
- Erosion Control Plan Sheets
- Noise Wall Plan and Profiles
- Landscaping Plans and Details
- Irrigation Plans and Details
- Road Standard Details
- Drainage and Water Details

- Erosion Control Details
- Traffic Control Plan Standard Details

#### 2.2.5 Final Specifications

Final Technical Special Provisions will be prepared by MacKay Sposito based on WSDOT 2020 Standard Specifications. It is assumed that the City will provide a template with all City of Vancouver Special Provisions, complete Division 1 Special Provisions, and manage the compilation of the full contract document package deliverable.

#### 2.2.6 Final Cost Estimate

Final Cost Estimate will be prepared by MacKay Sposito, using unit prices from the City and WSDOT/APWA bid tabulations for inclusion with the engineer's estimates for the Project.

#### 2.2.7 Final Design Updates as Needed

This task will be utilized if any additional comments received from the City after the Final Set submittal. If City finds any comments during the final review process or need additional supporting design documents, Mackay Sposito will utilize this task to update the plans or prepare the design document prior to bidding.

#### 2.2.8 Additional Design / Construction Support as Needed

This task will be utilized if any out-of-scope work is necessary to be performed during final design or construction.

### ***Task 2 Assumptions:***

- City of Vancouver to complete topographic survey as needed to supplement original City survey due to expanded project limits and/or reconstruction within the project area.
- Design concepts for street plans and intersections will not change significantly from those laid out in the 90% design.
- Right of Way Plans to be prepared by the City.
- No sanitary or water design to be completed by City or MacKay Sposito.
- City to provide example Technical Specifications and bid tabulations from recent projects. City will prepare front-end standard specifications.
- City will provide direction on aesthetic treatment of the walls in terms of coloring and texture.
- 7 noise barrier walls to be included in project. Design is to be in accordance with the AASHTO Guide for Noise Barrier Walls.
- No revisions to environmental, air quality, noise, or other technical discipline reports previously completed.
- Landscape and irrigation design is limited to areas from front of walk to back of curb, including stormwater planters and medians.

**Task 2 Deliverables:**

- Utility Conflict Reports and Correspondence
- Final Hydrology Report
- Final Plans, Technical Specifications, and cost estimate for civil and landscaping design elements (MacKay Sposito)

**Task 3 Traffic Engineering Final Design (Kittelison)**

Kittelison will lead final traffic engineering efforts. This work will be contracted through their current traffic engineering on-call agreement with the City.

**Task 4.2 Structural Final Design (WRK)**

This task advances the 90% PS&E to the 100% (Final) PS&E, where the documents will be ready for bid. This task includes addressing 90% review comments from the City of Vancouver review. For this task, it is assumed that one (1) design meeting will occur, at the Vancouver office of MacKay Sposito.

**Task 4.2 Assumptions:**

- Design is to be in accordance with the AASHTO Guide for Noise Barrier Walls
- MacKay Sposito will create the AutoCad plans and profiles for each wall, and provide them to WRK to use for the final wall drawings. WRK will seal and sign the final wall profile drawings and the wall detail sheets. The plan locations for each wall are to occur on general Civil plans for the project.
- 13 wall profile sheets and two detail sheets are estimated to be required.
- WRK construction phase services are included under task 6.1.

**Task 4 Deliverables:**

- Response log to City's 90% comments.
- Final design documents.

**Task 5: Public Involvement**

The City will take the lead on scheduling, coordinating, and holding public involvement events. We anticipate that one open house will be held during Final Design development. The subtasks below are for MacKay Sposito support of City lead public involvement efforts.

**5.2 Final Design Public Involvement**

MacKay Sposito will support City with the following efforts for Final Design public involvement efforts:

- Postcard invitation to stakeholders
- Open House Project Fact Sheets
- Open House Exhibits
- Attend Open House (assume 2 MacKay Sposito staff members)

**Task 5 Assumptions:**

- City to coordinate all logistics for open houses, including design, printing, and mailing postcard invitations.
- MacKay Sposito support and attendance at one open house event.

**Task 5 Deliverables:**

- Attendance at one Open House for 2(two) MacKay Sposito staff.
- Exhibits supporting invitations, mailouts, project fact sheets, and open house graphics.

**Task 6.1 and 6.2: Bidding and Construction Phase Support (MacKay Sposito and WRK)**

MacKay Sposito and WRK will perform engineering services during construction as requested by the City, which may include the following. The services described below are examples of the type of support that MacKay Sposito may provide at the request of the City:

- *Bidding Support* – Respond to question from prospective bidders;
- *PreConstruction Conference Support* – Attend and participate in the preconstruction conference;
- *Construction Contract Administration* – Provide limited administration of the contract during construction
  - Assist City by acting as a liaison with the contractor, design team, appropriate agencies, property owners, and utility franchises;
  - Respond to Requests for Information (RFIs), plan interpretation and/or changes
  - Assist City in the preparation, negotiation, and settlement of change orders.
- *Review Submittals* – Review submittals that may include shop drawings, samples, traffic control plans, test reports, and other data submitted by the Contractor for compliance with the information required by the contract documents.

**Task 6 Assumptions:**

- City will lead bidding and construction management support services. This task is considered an allotment for services requested by the City during the bidding and construction phase.

**Task 6 Deliverables:**

- To be determined based on services requested by City.