

ATTACHMENT 1 – SCOPE OF WORK

PROJECT BACKGROUND

This project makes improvements to Snoqualmie Parkway from SE 99th St to SR 202 (Railroad Ave SE). Improvements include grind and overlay pavement rehabilitation, loop replacements, ADA improvements including ramps and pedestrian push buttons at signalized intersections, channelization; and other related improvements all while keeping Snoqualmie Parkway open and passable to traffic.

SCOPE OF WORK

TASK 100 – PROJECT MANAGEMENT

Subtask 1.1 – Project Management

This task includes all work related to the management, administration, and coordination of Consultant activities. The Consultant shall provide the following project management services, including:

1. Regular communication with the City Project Manager on all aspects of work under this Scope of Work, including progress and budget.
2. Coordination of the Consultant's project team to ensure consistency across team efforts.
3. Provide a monthly progress report that addresses the following:
 - Current Project issues with recommended solutions.
 - Identification of any items anticipated to be required from the City and/or the Designer.
 - Summary of changes to the Consultant's scope and/or budget during the reporting period.
4. Prepare a Health and Safety Plan for the Consultant's own work to be performed while onsite during the construction period.

DELIVERABLES:

1. Progress Reports including schedule updates
2. Meetings agendas and notes, with revisions as required
3. Health and Safety Plan

TASK 200 –PRE-CONSTRUCTION SERVICES

This task consists of participation in a CM coordination kickoff meeting, development of a SharePoint based document control and information management system, assisting the City in preparing the pre-construction meeting and attending the pre- construction meeting.

SUBTASK 2.1 – CM COORDINATION KICKOFF MEETING

The Consultant shall attend the CM Coordination Kickoff Meeting and provide the following services:

1. Review the contract bid documents including the plans, specifications, and permit conditions.
2. Provide input to the City on the meeting agenda structure and topics for a CM coordination kickoff meeting with City staff.
3. Develop stakeholders' communication plan

ASSUMPTIONS:

1. The City will provide draft and final meeting minutes.
2. Assumes one meeting via Teams or Zoom, up to 2 hours.
3. The RE and Documentation shall attend this meeting.

DELIVERABLES:

1. Meeting agenda inputs.

SUBTASK 2.2 – DOCUMENT CONTROL AND INFORMATION MANAGEMENT SYSTEM

The Consultant shall tailor forms, tracking logs, systems, and related documentation for the information management and document control services to be performed during construction for electronic copies, as outlined below.

1. Develop forms to track receipt, logging, filing, review, and routing of Project documents. Document control forms shall address the receipt, logging, reviewing, routing, filing and storage of necessary Project and contract documents, including but not limited to submittals, correspondence, meeting notes, e-mails, reports, Requests for Information (RFI), change orders, substitution requests, shop drawings, photos, inspection reports, construction drawings, specifications, and other construction-related documents.
2. Develop a project-specific SharePoint site for use by the Construction Management team and accessible by the City.

ASSUMPTIONS:

1. Maintenance of the Document Control system will be provided for under Subtask 300.5.
2. Forms and logs shall be in Excel.

DELIVERABLES:

1. Electronic files of all contracts related documents and correspondence

SUBTASK 2.3 – PRE-CONSTRUCTION SERVICES

The Consultant shall provide the following pre-construction services:

1. Provide input to the City for the pre-construction meeting agenda.
2. Attend the pre-construction meeting.

ASSUMPTIONS:

1. Review and comment on draft meeting minutes distributed within two (2) days of meeting.
2. One pre-construction meeting, up to 4-hour duration.

TASK 300 – CONSTRUCTION SERVICES

The Consultant will be responsible for all aspects of general construction management and inspection of contractor progress, including field inspections, document control, and change management. This includes reviewing the Contractor's baseline schedule, investigating, and resolving Change Orders and Field Directives. The Consultant will be responsible for review, monitoring and inspection of the Contractor and its subcontractors' work on the Project for problems or any violation or incompliance in implementing the Project design or the Contractor's safety programs. This also includes communication with the City during the duration of the construction.

SUBTASK 3.1 – CONSTRUCTION PROGRESS MEETINGS

The Consultant shall provide the following construction progress

1. Schedule and lead the construction progress
2. Attend construction progress
3. Prepare and distribute meeting agendas.
4. Prepare draft minutes and distribute them within 1 day of the progress
5. Distribute the final meeting minutes within 2 days after receiving the City's comments.
6. Construction progress meetings

ASSUMPTIONS:

1. No field office will be provided for this Project. The Consultant shall conduct field work from a vehicle, equipped to provide data communication, and file storage.

DELIVERABLES:

1. Agendas.
2. Draft and final meeting minutes.

SUBTASK 3.2 – EVALUATE CONSTRUCTION SCHEDULE AND PROGRESS PAYMENTS

The Consultant shall provide the following services:

1. Review and comment on the Contractor's Construction Schedule and Phasing Plan, outlining the proposed construction activities, including:
 - Review the baseline construction schedule showing the association of the main activities, schedule restrictions from permits, and other constraints and milestones.
 - Review and comment on Contractor's baseline schedule submittal and review compliance with the Contract.
 - Evaluate Contractor's schedule submittals for percent complete on each activity and compare reported, actual, and planned work progress.
 - Review effects of change requests and proposals on the Contractor's schedule.
 - Review of Contractors' monthly pay requests for compliance with contract.
 - Measure and verify the completion of all items on pay requests and make a recommendation on approval for payment.
 - Submit monthly recommendations for payment for the City's approval.
 - Verify and report on the completion of all items for the final contract progress payment.

DELIVERABLES:

1. Comments on the Contractor's Baseline Construction Schedule and Phasing Plan.
2. Recommendations on Contractor's monthly pay requests.

SUBTASK 3.3 – CONSTRUCTION DOCUMENTS AND FILE MAINTENANCE

The Consultant shall provide services related to processing, tracking, and distributing of Requests for Information (RFIs) and submittals for the construction. The Consultant shall track all submittals to ensure timely review and return to the Contractor. The Consultant shall investigate and research RFIs as requested, track and distribute for response as appropriate to ensure timely response to the Contractor. Certain RFI responses may require coordination of response input from the City and/or design team. The Consultant shall check RFI responses for clarity, propose updated changes to the contract, and submit cost and schedule change proposals to the City. Services for this task may include but are not limited to:

1. Create, maintain, track, and distribute submittal logs to the City and Designer for approval.
2. Create, maintain, track, and distribute RFI logs to facilitate the review and commenting process.
3. Review submittals and submit written comments to the City on clarity and impacts to cost and schedule.
4. Coordinate with the City or design team for any material substitution requests from the Contractor.
5. Implement and maintain the Document Control Plan
6. Maintain the Project files conforming to the City's contract filing structure and Document Control Plan, which will include, at a minimum, all submitted and approved drawings, reports, RFI's, submittals, shop drawings, correspondence, nonconforming work reports, meeting minutes, and other Project information (digital photos, construction daily reports

7. Timely log and file all documents.

ASSUMPTIONS:

1. Submittals and RFI's will be saved electronically, hard copies will not be provided.

DELIVERABLES:

1. Submittal logs
2. RFI log
3. All project documentation shall be provided electronically.
4. Upload documents and maintain SharePoint

SUBTASK 3.4 - CHANGE MANAGEMENT

The Consultant shall oversee and manage change requests, proposals, Field Directives, and Change Orders. The Consultant shall communicate with the Project Manager to ensure the Contractor will complete the Project in accordance with the City's objectives of schedule, cost, quality, and safety. The Consultant shall be responsible for the following: reviewing, evaluating, and commenting on the Contractor's proposals and impacts to the Project schedule; making recommendations; performing change/cost negotiations with the Contractor as requested and directed by the City; preparing meeting notes; and documenting negotiations.

Services for this task include but are not limited to the following:

1. Support the City in anticipating construction activities or conditions where changes affecting cost or schedule may apply, or when input from the Designer may benefit the Project.
2. Review and evaluate change proposals, including Field Directives and Change Orders for entitlement/cost.
3. Review effects of change requests and proposals on the Contractor's schedule.
4. Track, verify, and summarize Time and Material sheets.
5. Prepare Change Order reports.
6. Attend and document all negotiations.
7. Prepare change order packages for routing to the City.
8. Package and process Change Orders for payment.
9. Track Field Directives.
10. Coordination and QA review of construction Contractor's (redline) of Project plans.

ASSUMPTIONS:

1. Changes will be sent to the City for review and approval

DELIVERABLES:

5. Change Order status reports with backup information.
6. Written correspondence (notice of deficiency) when tests, construction or any document prepared by the Contractor.
7. Negotiation meeting notes (draft and final).
8. Documentation of field directive evaluations and recommendations.
9. Change Order packages including documentation of change order evaluations and recommendations.

SUBTASK 3.5 - INSPECTION AND OTHER FIELD SERVICES

The Consultant shall provide inspection and field services on site when the Contractor is working and shall report to the City daily.

The Consultant shall provide the following services:

1. Observe and inspect the work performed by the Contractor for completion in conformance with the approved plans and specifications.
2. Document the work performed by the Contractor and prepare Construction Daily Reports (CDR) that include estimated quantities and tracking of materials, labor and equipment on the site, work in progress, work completed, discrepancies, discussions, test results, weather, site conditions, and other pertinent items.
3. Provide a complete photographic record of pre-construction and construction conditions, including daily photographs using a digital camera, preferably by the same person, from unchanging vantage points as well as supplemental photographs of unusual occurrences or problem events.
4. Collect and distribute reports from testing companies and special inspectors. Function as the main point of contact for site visitors, permitting agency inspectors, utility crews, special inspectors, and other consultants and subcontractors.

ASSUMPTIONS:

1. Inspection time is estimated at 8 hours per day for 75 working days.

DELIVERABLES:

2. The inspector will provide a copy of the previous day's daily report to the CM daily (uploaded to the SharePoint site within 24 hours of work observed).
3. Field (Work Change) Directives, as needed.
4. Project photos, in digital format, will be provided as part of the document control system.
5. Copies of reports from testing companies and special inspectors

SUBTASK 3.6 – CONSTRUCTION CONTRACT CLOSE-OUT

The Consultant shall provide the following construction contract close-out services:

1. Prepare a draft punch-list of items to correct or completed. Coordinate with City and Contractor for a final inspection meeting at the site to review the punch-list and development of a final punch-list.
2. Conduct a final review of Contractor's completed record documents to ensure completeness and accuracy.
3. Prepare a Certificate of Substantial Completion
4. Prepare a Certificate of Physical Completion, following the completion of all punch-list items and other requirements that may exist.

DELIVERABLES:

1. Draft and final punch-list.
2. Prepare Certificate of Substantial Completion
3. Prepare Certificate of Physical Completion.
4. Close-out documents (hard copies and electronic copies).

TASK 400 –Material Testing

Provide materials testing (oversight and report review) and special inspections services as necessary for paving and ADA requirements by prime consultant or as a subconsultant contracted directly to the prime consultant.

PROPOSED WORK SCOPE:

This cost estimate is based on quantities provided by the Client.

1. Sampling of HMA aggregate for acceptance and oil at the plant for ignition oven correction factor.
2. Concrete inspection/sampling for ADA ramps. Includes next-day pickups
3. Inspection and testing of HMA placement and compaction during overlay paving (minimum: one test per 100 tons).
4. Sampling and testing HMA during overlay paving for Rice density, extraction and gradation (minimum: one test sample per day or 1000 tons).
5. Written field reports will be prepared for all inspections and reviewed for QC.
6. This estimate is based on information and estimated quantities from the client. Quantities are from 60% plans.

Material Testing - ESTIMATED HWA LABOR:

Scope of Services	2023 PERSONNEL & HOURLY RATES						
	GeoEng VIII \$87.50	GeoEng IV \$50.00	Geol III \$40.50	Geol II \$33.00	Clerical \$33.00	TOTAL HOURS	TOTAL AMOUNT
<i>Asphalt Inspection and Testing, including:</i>							
Inspection and Testing during HMA overlay (18 days of overlay, 12hrs a day)				216		216	\$7,128
HMA Oven Ignition Correction Sampling of Aggregate and Oil (2 mixes x 2 initial sources, then at WSDOT sampling frequency)				8		8	\$264
HMA Sampling at Batch Plant (18 trips x 3 hrs.)				54		54	\$1,782
<i>Concrete Inspection and Testing, including:</i>							
ADA Ramp Testing (7 periodic visits, one test per curb ramp, plus next-day pickups)			28	21		49	\$1,827
<i>Project Management</i>							
Preconstruction Meeting	2		2			4	\$256
QA Review, Reporting, Submittal Reviews, and Report Distribution	16				8	24	\$1,664
DIRECT SALARY COST	18	0	30	299	8	355	\$12,921

Material Testing - LABORATORY TESTING ESTIMATE:

LABORATORY EXPENSE DESCRIPTION	Est No.	Unit Test	TOTAL
Asphalt Ignition Oven Correction (2 mixes, 3 burns each)	6	\$150	\$900
HMA Aggregate Acceptance (Voids, FF, SE) (2 mixes from 2 sources)	4	\$315	\$1,260
Bitumen Content by Extraction with Gradation of Aggregate (18 samples)	18	\$205	\$3,690
Maximum Theoretical Specific Gravity of HMA (Rice Density) (18 samples)	18	\$150	\$2,700
Concrete Compressive Strength Testing (7 sets x 4 per set)	28	\$35	\$980
LABORATORY TOTAL:			\$9,530

EXPENSES:

EXPENSE DESCRIPTION	Total Cost
Thin Lift (HMA Testing) Nuclear Gauge Rental (\$60/day), assuming 18 days	\$1,080
Mileage to and from the job site for all inspections/pickups at IRS mileage rate (32 trips)	\$1,500
Mileage for HMA, and aggregate sampling, at IRS mileage rate (20 trips)	\$1,400
EXPENSE TOTAL:	\$3,980

ESTIMATED PROJECT TOTALS AND SUMMARY:

Direct Salary Cost (DSC)	\$12,921
OH @ 2.0831 * DSC	\$26,916
FF @ 30% * (DSC)	\$3,876
Total Labor Cost	\$43,713
Laboratory Testing	\$9,530
Direct Expenses	\$3,980

ESTIMATED PROJECT TOTAL:**\$57,223****Assumptions:**

1. These estimates may require adjustment due to the Contractor's rate of construction, weather delays, source changes and/or other factors beyond our control.
2. The HWA PM reserves the right to shift hours between the various subtasks as required.
3. The HWA work scope does not include safety assessment nor work pertaining to any environmental issues.
4. This cost estimate was prepared with the understanding that the Client will schedule inspection as needed.
5. All night work is charged at an 8 hour minimum segment. Night work cancelled within 12 hrs of scheduled time will be charged 4 hrs.
6. All weekend work is charged at an 4 hour minimum segment. Weekend work cancelled within 12 hrs of scheduled time will be charged 4 hrs.
7. 3000psi, Commercial, and concrete for curb and gutter, and sidewalks will not be tested.
8. This cost estimate assumes no aggregate compaction or acceptance testing will be performed.